outlook

the official journal of the National Emergency Nurses' Affiliation Inc.

Volume 33, Number 1, Spring 2010

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SEE YOU IN *Saint John* NEW BRUNSWICK MAY 6–8, 2010

NENA

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Guidelines for submission

Editorial Policy

1. **Outlook** welcomes the submission of clinical and research articles, case studies, and book reviews relating to the field of emergency nursing.

2. Statements or opinions expressed in the articles and communications are those of the authors and not necessarily those of the editor, publisher or NENA. The foregoing disclaim any responsibility or liability for such material and do not guarantee, warrant or endorse a product or service advertised in this publication, neither do they guarantee any claim made by the manufacturer of such product or service.

3. Authors are encouraged to have their articles read by others for style and content before submission.

Preparation of Manuscripts

1. The original copy of manuscripts and supporting material should be submitted to the **NENA Outlook** editor. The author should retain one complete copy.

2. Manuscripts must be typed, double-spaced (including references), on 8 ½" × 11" paper with adequate margins. Manuscripts longer than one page must be submitted in a disk format in Word Perfect or Word. Submissions are accepted via e-mail to the communication officer.

3. Author's name(s) and province of origin must be included.

4. Clinical articles should be limited to six pages.

5. Direct quotations, tables and illustrations that have appeared in copyrighted material must be accompanied by written permission for their use from the copyright owner, and original author and complete source information cited.

6. Photographs of identifiable persons, whether patients or staff, must be accompanied by signed releases, such as the following: "I hereby give (author's name) authorization to use the photograph of (subject's name) in the **NENA Outlook**."

Please submit articles to:
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e-mail: communicationofficer@nena.ca

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Upper cover image courtesy New Brunswick Department of Tourism and Parks. Lower cover image courtesy Tourism Saint John.

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President's message

What a ride!

Hello everyone… I am writing you today from the Vancouver Paralympic Village (formerly the Vancouver Olympic Village) where I have been working as one of the managers of the medical services. Your national treasurer, Lori, has been working in Whistler, as well. Needless to say, 90 days without a day off sounds like a fun idea at first… and then reality hits on about day 40-something… when the whole world is sitting down to watch the opening ceremony of the Olympic games and we realize that we're only halfway there.

To the world, the Olympic and Paralympic games are a few weeks, but to us putting on the show, it's been years of planning and a 90-day drive that we will never forget. Of course, during this time, I have still been your national president and have had a great opportunity to meet many people from around the world travelling with the teams, and can't wait to share my experiences in future **Outlook** issues and at conferences.

On the NENA front, I have continued to foster relationships with other organizations and within the health care industry. Since I last wrote, I have been to Toronto again to sit on a national advisory committee for pandemic influenza research and will be heading there again in the next couple of weeks (right after the games) to sit on another research advisory panel for pandemic planning. Thankfully these efforts are funded by the research supporters, which allows NENA to get our voice out there and not spend the membership money to do so!

Well that's it for now… I look forward to seeing ALL of you in Saint John in May for the national conference… I know to some of you it may be a bit far away, but only those on Vancouver Island and north of Inuvik can say that they have to travel further than me, so no excuses! We look forward to seeing old friends again and making new ones as we learn to "Ride the Wave of Change". Information and registration forms are available on the NENA website at **www.nena.ca**

Landon James, RN, BSN, MA
NENA President

From the editor

I recall a story we read to our children of a packrat that lived near an abandoned gold miner shack. "A peculiar characteristic [of the packrat] is that if they find something they want, they will drop what they are currently carrying… and "trade" it for the new item. They are particularly fond of shiny objects" (**http://en.wikipedia.org/wiki/Pack_rat**). One day this packrat spotted a dull yellow stone and picked it up to carry it off to his den. On his way to its burrow, it spotted a foil gum wrapper and, dropping the dull yellow gold nugget, snatched the debris and carried it off. Failing to appreciate the value of the first object, he was enthralled with the attractiveness of something lacking any value.

What does a children's story about a packrat have to do with emergency nurses? We are constantly confronted with choices in our work and in our personal lives. Choices about how we use our time, how we use our money, whose companionship we seek, what continuing education opportunities we select, and so on. Usually, selecting one thing requires foregoing another.

I have heard from the planning committee for the 2010 NENA conference and I am confident that this year's conference in Saint John, NB, is going to be a gold nugget! If you are undecided about attending, I encourage you to try to arrange to be there. It might mean missing something else, but it's going to be a worthwhile event. In addition to wonderful sessions, there will be a great opportunity for networking with emergency nurses from across Canada and a chance to have some fun along the way.

See you in Saint John,
Stephanie Carlson

Riding the Wave of Change

May 6–8, 2010
Saint John, New Brunswick

Find information about the upcoming NENA Conference on page 9.

outlook
NENA at work

Use of proper equipment prevents mishaps

By Catherine McCormick, Halifax, NS

Did you know that using parenteral syringes (with Luer locks that can be attached to a needleless IV system) to administer oral/enteral liquids presents a serious chance of misadministration? It can take a momentary mental lapse to connect it to an IV and inject it into the patient.

Most health care professionals believe that this type of error would NEVER happen to them; unfortunately, these types of errors have happened (even to the most experienced nurse).

Take for example these cases:

Case 1: A premature infant was being given intermittent feeds with a parenteral syringe. It was given intravenously instead of via NG and the infant died.

Case 2: Yogurt was drawn up in a parenteral syringe and then accidentally administered to an adult patient through a PICC line. The line was then flushed with water. The distal ends of the enteral and PICC lines were all unlabelled and looked similar.

Case 3: Midazolam and acetaminophen were drawn up in a parenteral syringe and administered IV to an 11-year-old child being prepped for the OR. An emergency came into the department and another nurse took over the child's care. The other nurse administered the medication IV, thinking that the child was NPO for surgery.

The consistent use of oral syringes for the preparation and administration of liquid medication should be practised in all health care settings.

Oral syringes should be a standard of practice in every health care setting.

Ref: ISMP Oct. 22, 2009

outlook
NENA at work

"Nurses eat their young"

By Kimberly Dondale, RN, BScN

This statement was heard several times throughout nursing school. I thought it was a joke, but after speaking with several of my classmates 10 months after graduation, I am starting to think that there may be something to this statement.

I am a 2009 grad from the BScN program at Dalhousie University. Along with me, one other grad from my graduating class was hired right out of nursing school to work in the emergency department at Soldier's Memorial Hospital (SMH), Middleton, Nova Scotia. We work in a rural hospital with limited resources. This causes nurses to rely on their skill and ability.

For a new grad, the transition period from student to nurse can be trying and scary, as one tries to become familiar with her surroundings. Although being told that the ER was no place for a new grad, I knew it was where I wanted to be after graduation. During my fourth year of school, I tried to prepare myself by taking extra courses that would be beneficial in the emergency setting.

I am fortunate to be working in the emergency department with the present staff, as it is encouraging and supportive. I can honestly say that the nurses I work with have done everything in their power to make me feel comfortable and have created a working environment that is safe.

I participated in a 10-week co-op course during the summer between my third and fourth year of school, which took place at SMH. The co-op allowed the staff and me the opportunity to get to know each other. When the time came for me to start work as a new grad, the senior staff members took it upon themselves to provide a sufficiently long orientation to enable me to feel comfortable in my new setting and my new position. While doing this, the staff always communicated with me to ensure me that I was not expected to have the experience of senior staff, and that it was their job to guarantee that I felt safe within the tasks I was being asked to do. This was done without making me feel that I was inadequate.

Do nurses eat their young? I suppose they can, and based on conversations I have had, it does not matter if you work in the emergency department or on a medical floor for this to occur. From my experience, the transition from student to nurse has been wonderful, due to the help of considerate, caring, senior nurses who have taken the time to invest in their new staff.

To future nurses wanting to become emergency nurses, it is possible. Make sure you find a senior nurse who is willing to invest in you. Be eager to learn and never be scared to ask for help. For the senior nurses who create that safe environment that I have experienced, thank you! It is you who are securing the future of nursing—and for those of you who "eat your young," remember you were once in our shoes. Try to have patience, as it is you who can encourage or discourage the new nurse to become great.

Canadian nurses in post-Chernobyl Ukraine

By Mary Dubyk-Wodoslawsky, RN, CDE, Irene Osinchuk, RN, BN, ENC(c) and Anne Sochan, RN, MA

For more than seven years, Canadian Registered Nurses Irene Osinchuk (from Winnipeg) and Mary Dubyk-Wodoslawsky (from Toronto) have spent their summer vacations volunteering their professional services for the underserved, poor and orphaned in Ukraine.

Irene and Mary are dedicated volunteers with the Children of Chernobyl Canadian Fund (CCCF) Medical Advisory Committee (MAC). This organization provides humanitarian assistance and health care-related professional services to orphanages, hospitals, rehabilitation centres and health care clinics throughout Ukraine. Initially, CCCF focused on the hardest hit areas affected by the Chernobyl nuclear explosion in 1986. MAC has since expanded its activities to all of Ukraine.

More than 20 years have passed since the Chernobyl nuclear disaster, yet the full scope of its impact on the health of Ukrainians is difficult to grasp. When Chernobyl Reactor No. 4 exploded, it sent radiation into the earth's atmosphere equivalent to 500 Hiroshima atomic bombs. It drifted 3 km north over the sleeping town of Prypiat, 10 km further into Belarus and Russia and, finally, over most of Northern Europe. A few days later, the wind, loaded with radioactive iodine, cesium and strontium, turned southward over the capital of Ukraine—Kyiv.

While estimates are difficult to confirm, as a result of the immediate aftermath of the explosion, in Ukraine, Belarus, and Russia:

- 40,000 individuals who were involved in the clean-up of the reactor, most of them men in their 30s and 40s, have since died.

By the end of 2001 (the most recent available statistics from Ukraine's Ministries of Health, and Chernobyl), the Ukrainian state was caring for more than 3.3 million people affected by the Chernobyl "accident", including 1.2 million children. Generally:

- Incidence of leukemia/other blood disorders has increased—particularly in children
- 50% of men, aged 13 to 29, have problems with fertility—highest rate in the world
- Chromosomal damage is 7x higher in children born to men involved in liquidating the reactor, including Down's syndrome, cleft palate and other deformities
- Increased incidence of birth defects and nervous system disorders in babies born to females who were between the ages of one and six years at the time of the Chernobyl disaster
- Increased number of babies born with brittle bones due to strontium replacing bone calcium
- Infant mortality is twice that of the European average
- Thyroid cancer is occurring at rates 80 times the global norm, and cardiac problems, chronic skin conditions, gastrointestinal problems, respiratory illness, and miscarriages have increased.

The consequences of the Chernobyl "environmental health care" catastrophe are not yet known. The half-life of some radiation elements lasts for thousands of years. Long-term contamination of land, water, and ecosystems exists, yet many continue to live on lands contaminated by radiation because they cannot leave. While approximately 70,000 inhabitants from Chernobyl and Prypiat were evacuated to 53 locations throughout Ukraine, most lost their possessions and livelihoods. Indeed, the physical, psychological and social consequences of Chernobyl are just beginning to be recognized and addressed. The incidence of post-traumatic stress disorder, alcoholism and drug abuse is considerably higher among Ukraine's "environmental refugees" compared with the general population. While the Ukrainian government is aware of these health concerns, it is unable to adequately finance and support all of the health care services its people require, as it struggles to develop its fledgling democracy.

Through its programs, CCCF/MAC distributes pharmaceuticals, diagnostic and life-support equipment, as well as educational resources to Ukraine's environmental refugee hospitals, treatment centres, and rural health care clinics. CCCF also sponsors a variety of initiatives aimed at promoting the health and well being of its inhabitants.

As members of CCCF/MAC, Osinchuk and Dubyk-Wodoslawsky have participated in delivering humanitarian assistance to some of the hardest-hit areas post-Chernobyl. Responding to the needs of our Ukrainian partners, and working with our Ukrainian colleagues to address those needs is "what we do", notes Osinchuk. Whether fundraising in Canada for a much-needed neonatal unit, or delivering vitamins and school supplies to an orphanage north of Kyiv, it is working together "locally and internationally" that makes a difference in the lives of those affected by Chernobyl.

Since 2002, Irene and Mary have also worked with another of the sub-projects of CCCF, "Help Us Help the Children" (HUHTC). CCCF/HUHTC is an orphanage-focused program that strives to ensure that basic health care, educational, and social needs of orphaned children in Ukraine are met. Many of them live in the Chernobyl zones. There are more than 100,000 orphans in Ukraine under state care. Some are "true" orphans, where one or both parents have died. Most, however, are "social" orphans, having been abandoned by their parents too poor, or too ill to look after them. Ukraine's orphanages, despite being state-funded institutions under the auspices of the Ministry of Education (and the Ministry of Health, if the orphanage is dedicated

to physical and/or mental disabilities), depend heavily on private, international, and humanitarian assistance.

"Our nursing skills are useful in the care of Ukraine's orphans," comments Dubyk-Wodoslawsky. Children from each orphanage attend a summer camp in the Carpathian Mountains in Western Ukraine. What is a "rite of passage" for most children to attend summer camp in Canada, for Ukraine's orphans, these experiences are funded by the CCCF/HUHTC program. Summer camp offers a variety of "life skills building opportunities" for the children. Irene and Mary, graduates of the St. Boniface School of Nursing in Winnipeg, keep up their friendship and contribute their professional "camp nursing" knowledge and skills in caring for Ukraine's orphans. Their activities range from teaching basic first aid, hygiene, and water safety to engaging the children in health promotion activities including HIV/AIDS awareness, infectious disease control, and anti-trafficking strategies aimed at preventing the victimization of boys (into organized crime) and girls (into prostitution or slavery) when they leave the orphanage at age 17—no longer wards of the state. CCCF/MAC are always looking for more nursing volunteers!

For more information on Children of Chernobyl Canadian Fund, please see **www.chornobyl.ca** or contact us at: 2118-A Bloor St. W., Ste 200, Toronto, ON M6S 1M8. Telephone: (416) 604-4611, E-mail: **cccf@bellnet.ca**

Editor's note: *The website URL reflects a transliteration of the Ukrainian language form of the name of the city.*

outlook
FNSC

Forensic Nurses' Society of Canada (FNSC)

By Dr. Cathy Carter-Snell,
Associate Professor, Coordinator,
Forensic Research Network,
Mt. Royal College

The FNSC is now formally a special interest group of the Canadian Nurses' Association and on its way to becoming a fully elected organization. We thank Sheila Macdonald and Sheila Early for their participation in founding the FNSC and for their contributions as inaugural membership coordinator and communications officer respectively, as their terms ended in spring 2009. A fall election brought us some enthusiastic and energetic new board members—Nancy Horan (ON) is the new membership coordinator and Joanne Maclaren (BC) is the new communications/education coordinator. Susan Wilson (NS) offered to act as secretary in the absence of a nominee. A president-elect position (three-year term) and a treasurer position (two-year term) are both up for nomination and election this spring. The new membership year starts on April 1, 2010, and will kick off with a free webinar for all members on April 28 (8 PST, 9 MST, 11 EST) followed by the annual general meeting online. We have a number of ideas for webinars, position papers and online communications to get members more involved this year. There is also an opportunity to assist FNSC in welcoming the International Association of Forensic Nurses to Montreal in fall 2011. We are excited about the expanded board and looking forward to active participation from our members, many of whom are ER nurses and members of NENA as well!

If you are interested in joining the Forensic Nurses' Society of Canada (FNSC), first complete an application form located at **http://www.forensicnurse.ca/members/members.htm**.

NENA is pleased to provide an opportunity for the Forensic Nurses' Society of Canada to communicate with its members on the pages of the Outlook. Welcome, Forensic Nurses!

FNSC Forensic Nurses' Society of Canada
http://www.forensicnurse.ca

Calling all instructors

If your students have put the work into a presentation, a case study, a disease process, research, etc., encourage them to write it up into a brief article to be published in **Outlook**. Our section editors will work closely with them to help in the process, and they can see their hard work in print, help to educate emergency nurses across the country and add a publication to their resume—a win/win situation!

Articles can be submitted to the Communication Officer, Stephanie Carlson, Box 31E, R.R. 1, Station Main, Regina, SK S4P 2Z1, ***communicationofficer@nena.ca***

Canadian Emergency Department Information System (CEDIS) and why it's important to emergency nurses!

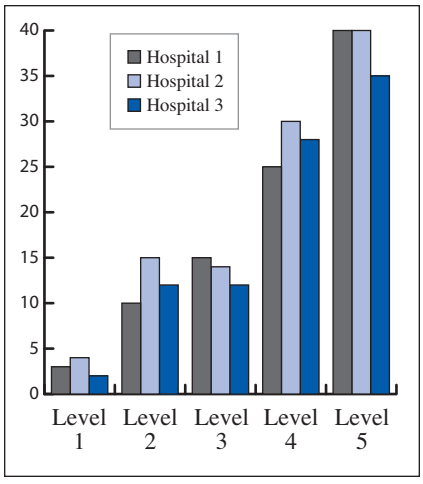
By Pat Walsh

History

The objective of the Canadian Emergency Department Information System (CEDIS) working group is to develop a comprehensive national ED data set that meets the information needs of Canadian EDs (cited CAEP website).

A few years ago, although it feels like only yesterday, NENA and CAEP joined forces and created a working group to look at important data elements that should be captured in ED settings. We recognize that data capture would be easier in sites that were fully or partially electronic. That working group was called the Canadian Emergency Department Information System (CEDIS) and comprised representatives from NENA, Canadian Association of Emergency Physicians (CAEP), AMUQ, the Quebec Emergency Physicians group, Society of Rural Physicians of Canada, and the Canadian Pediatric Society–Emergency.

Other data sets were researched from Australia, the United States and the United Kingdom, as well as the National Ambulatory Care Reporting System (NACRS) data set here in Canada. Key data elements were discussed and definitions established and posted to CAEP's website. At this point, the group decided to invite the Canadian Institute for Health Information (CIHI) to the table to discuss limitations with NACRS and to build positive relationships for the purpose of adapting the dataset to meet emergency department needs.



Time to triage by CTAS Score

What kind of data are going to be collected and why does it matter?

The full list of CEDIS data elements can be accessed through **http://www.caep.ca/template.asp?id=7A2EA6B42AFC4F7F80D62157C8F35601**. Some of the elements in the document are: date and time of arrival, date and time of triage, presenting complaint, time to physician, time to consultant, and so on.

Many emergency departments have long triage wait times, overcrowding and no real way to define why patients are not seen more quickly or what type of patient is coming through the doors and staying in the ED for extended periods of time. Electronic capture of these data makes more sense, as larger volumes of data can be generated and available for reporting and analysis.

Hospitals that sign up with CIHI and NACRS will have access to quarterly reports with national comparisons of data. Established benchmarks will become the norm. This will allow facilities to make sense of their data, enabling them to achieve improved patient outcomes. Without measurement, there is no way to identify or track improvements.

Very exciting work was accomplished in the last five years as complaint-oriented triage was established using the presenting complaint list work done nationally through CEDIS working group. Additionally, the discharge diagnosis project has just been completed. It will enable physicians to abstract their own ED records using a subset of the ICD 10 codes. This work will soon be published in Canadian Journal of Emergency Medicine (CJEM) and will, over time, influence abstraction of ED visits. Many emergency departments across the country do not abstract ED visits, resulting in the loss of a large volume of data.

Emergency nurses are urged to remain engaged and speak to the data elements that we will be expected to collect. By advocating for nursing data elements, we can also give meaningful feedback to administrators and government, highlighting the way care is delivered in the emergency department by nurses!

In the future!

Work will continue on defining the remaining sets of data elements for both mandatory and optional elements. Indicators derived from a national working group will be incorporated into these data elements, providing uniformity in data collection and reporting for all Canadian emergency departments. Nurses from NENA will continue to advocate and work on behalf of all emergency nurses at the national table.

It is an exciting time to be working in Canadian health care, and it is this generation of nurses and doctors who will benefit from improved data about the patients we serve!

Sample report (fictional data)

Time to triage by CTAS score

A full committee listing is available on CAEP's website. The current co-chairs are Dr. D. Sinclair (CAEP) and Pat Walsh, RN (NENA). More on CEDIS can be found by going to the CAEP website, **www.caep.ca**

Comments or inquiries are welcome and can be directed through the NENA Communication Officer.

Mark your calendar and save the date!

Riding the Wave of Change

NENA

Hilton Hotel & Conference Center
Saint John, NB

May 6–8, 2010

Conference announcements:
www.nena.ca

Greetings: Every minute of every day, emergency nurses are continually "Riding the Wave of Change." Overcrowding, diversion, critically ill and injured patients, anxious families, understaffing, new equipment and new technology are only a few of the stressors that make us continually adjust our practice. Join other nurses from across the country to brainstorm problems, and then laugh about these problems, talk about solutions and commiserate when change seems impossible. Hear our speakers present ideas that will help us to continue to provide optimal care to our patients and their families and to help us in "Riding the Wave of Change."

The New Brunswick Conference Committee

By NENA's National Course Administration Committee (NCAC)

Instructor Networking Breakfast Session at 2010 NENA Conference in Saint John, NB

Please join us for breakfast on Friday, May 7, 2010, 0715–0845, Hilton Hotel (room to be announced)

- Meet members of NCAC
- Updates on TNCC, ENPC, CATN-II courses
- Opportunity to ask questions
- Sharing of teaching tips/resources with other instructors

This is a free session, but we need to know in advance that you are planning to attend.

Registration information is on the 2010 NENA Conference Registration form/brochure, available on the NENA website at **www.nena.ca**

Course administration updates

Attention, course directors!
Send NENA course fees to new NENA Treasurer:
Lori Quinn, NENA Treasurer
101, 1001 West Broadway—Unit 167
Vancouver, BC V6H 4E4
E-mail inquiries: **treasurer@nena.ca**

PLEASE include the appropriate paperwork when sending your fees to the NENA treasurer. There is an ongoing problem with cheques being sent to the NENA treasurer without the appropriate information (course number, number of participants, course director, province course was held).

NENA treasurer is working on electronic invoicing and receipts for course fees.

Revised Canadian Course Administration and Resource Manual
As per the contract between NENA and ENA, Canada does follow the ENA Administrative Guidelines for TNCC, ENPC and CATN-II courses. We are permitted to customize some administrative procedures. NCAC has developed a Canadian Course Administration Manual, which was last revised in 2006.

We have revised this manual again, entitled, **Interim Canadian Course Administration and Resource Manual,** which will be in effect until the online course application process is available through **www.nena.ca**. Apologies for the delay in the availability of this manual on the NENA website.

You can now download this interim manual from the NENA website.

NENA recruitment/retention PowerPoint presentation
Course directors are asked to include the new NENA recruitment/retention slide presentation during their TNCC, ENPC and CATN-II courses. This presentation can also be shown during conferences and other educational events.

You can download the PDF version of NENA Recruitment PowerPoint from the NENA website at **www.nena.ca**, under the "Membership" section.

Current NENA membership required of all instructors
A reminder that all instructors/course directors teaching in Canada must have a current NENA membership. It is the individual instructor's responsibility to renew, but NCAC is asking that course directors also ensure their instructors are current.

Membership renewal will be due July 1, 2010.

Course applications to ENA course operations
Course directors are still asked to submit their course applications to **courseops@ena.org** when submitting them via email, as someone is always monitoring this email address regardless of who is out of the office.

We will let course directors know when the process will be changing over to submitting course applications directly to NCAC via the NENA website.

All course manuals and materials will continue to be shipped from the ENA office.

Update on French translation of ENPC and TNCC course materials
NCAC appreciates the efforts of Claire Thibault, Senior Advisor, MUHC Pediatric Network in Montreal, and the McGill University School of Translation, for the translation of our course materials. NENA has financially contributed to this project, which has been subsidized by McGill.

TNCC 6th Edition

- Both Exam A and Exam B have been translated
- McGill is currently translating the slides (anticipate completion Summer 2010)
- The Canadian Military has expressed an interest in translating the provider manual. Permission has been granted by ENA, NCAC and Claire Thibault
- Canadian Military is currently in the process of working with a government translation service—no word yet on when we can expect a French TNCC provider manual
- Course directors who have French-speaking TNCC course participants can request available French course materials from the NCAC Chairperson at **chairncac@nena.ca**

ENPC 3rd Edition

- Exams and slides have been translated and are available to course directors on a CD
- We anticipate the Provider manual to be ready by late Spring 2010
- NCAC will be discussing reproduction/distribution/purchase price of this French ENPC package with both ENA and NENA board of directors

- ENPC course directors with French-speaking participants can contact NCAC chair for more details on the availability of these materials

Course contract between ENA and NENA

- Our current contract is up for renegotiation in fall 2010
- We may see price increases for course manuals and fees to ENA
- We will be looking to renegotiate some areas of our contract around such areas as French course materials and grant funds

Instructor courses in Canada

NCAC endorses the dissemination of courses throughout the country and encourages the development of new instructors. If you require an instructor course in your area, please send a letter of intent, outlining the rationale for more instructors, to NCAC members at **ncac@nena.ca** prior to requesting your course.

NCAC also receives many emails from nurses asking about instructor courses across the country. Our role is to help determine instructor needs and to help facilitate those instructor courses to be scheduled.

NCAC also looks at the need for instructor trainers (faculty) across the country.

TNCC Update

TNCC Reverification Course

ENA is pleased to announce that a new TNCC reverification course, based on the 6th edition TNCC provider course, has been developed. Course directors were mailed the new CD and course information in August 2009.

Participants must have a current **TNCC provider card within the past four years,** and submit a copy with their course application. **There is no grace period.** The reverification course will be offered over one day. Participants do need to prepare by reading the TNCC Provider manual, 6th edition, and completing a pre-test before the course. Key points from most lectures will be reviewed, as well as the skill stations. As with the provider course, participants must complete the written exam and the trauma nursing process evaluation station.

As with the ENPC reverification course, NCAC has been piloting this TNCC reverification course. Pilot sites identified so far include Ottawa, Calgary and Winnipeg. Course directors of these pilot courses have been asked to provide feedback on this new course.

NCAC will review this feedback at our May meeting in St. John, then make recommendations as to the offering of this course in Canada.

TNCC mechanism of injury lecture

Though mechanism of injury is discussed in each chapter of TNCC, NCAC suggests that the information in the previous lecture is so valuable that you may still wish to incorporate it into your course as a lecture.

Some instructors are currently doing this and already have prepared material. Should you wish to receive the "Mechanism of Injury" PowerPoint for your 6th edition TNCC courses, simply e-mail **ncac@nena.ca** with your request. Please provide both your email and mailing address—if the file is too large to be emailed, you will be sent a CD.

ENPC Update

ENPC Revision Process

- Work is underway on the 4th edition of the ENPC provider manual
- Canadian ENPC instructors have submitted material for inclusion for many of the chapters
- NCAC has asked ENA to be included in the draft chapter review process, which is expected to start in spring 2010
- Development of skill stations, teaching materials and the revised instructor course will follow. NCAC hopes to be involved in all aspects of this course revision.

The 4th edition of the ENPC course is not expected to be ready until 2011.

CATN-II Update

There are currently CATN-II course directors and instructors in British Columbia, Alberta, and Ontario. Manitoba has started the process for two course directors. NCAC would like to see the CATN-II course offered across the country. Many course directors and instructors are willing to travel.

If you would like to host a CATN-II course in your area, please contact **ncac@nena.ca**. The maximum number of participants is 24.

Contact us: NCAC committee members

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Awards of Excellence

Do you have an idol? Someone who helped you through that long day, evening, or night shift in ER? Well, NENA wants to hear about them! NENA is looking for nominations for Awards of Excellence in emergency nursing. There is no limit to the number of awards that are awarded in four categories: Emergency Nursing Practice, Emergency Nursing Research, Emergency Nursing Administration, and Emergency Nursing Education. The nomination form is on page 31.

2010 Olympics—Vancouver village polyclinic

By Sharron Lyons

The story begins just over a year ago when Landon James and Dr. Bob Chamberlain (aka Dr. Bob), the polyclinic managers, leapt to work to set up and populate the polyclinic. Not only did they have to obtain, on loan, virtually every kind of medical equipment known to human kind (including a most impressive portable MRI and CT scan!), but they also had to pick up these tools and create space for all that equipment, find staff and then set it all up!

The clinic's mission is: To supply all Olympic family members (athletes, coaches, and officials) with full medical services and to provide village workforce with First Aid in the case of injuries through accidents.

What does this mean? It means that the polyclinic can provide relatively quick service from scans to lab work onsite!

Raising the Olympic flag in the Vancouver athletes' village.

Our trauma bay.

With 400 medical volunteers, every field is covered from two dentists to all medical specialties: such as cardiology, orthopaedic surgery, ophthalmology and dermatology!

Many nurses volunteered, all of whom have come from an emergency background and are currently proving their skills not only in that area, but also in other areas like administration.

Interestingly, the huge part of the polyclinic dedicated to "therapy" is also very popular with athletes! Although chiropractors and massages rate highly, the really "cool" therapy, so to speak, is the "regeneration-contrasting bath". This means going from two minutes in a 10-degree Celsius tub to a 60-degree Celsius tub—wearing mainly goose bumps for some!

All supervisors say this experience has been an incredible journey; all disciplines have worked well together. It's been wonderful for knowledge sharing across all groups and we haven't had a question or situation for which we couldn't find an answer!

Some staff from across Canada.

Sherry Uribe, B.C. Director, Landon James, NENA President, and Sharron Lyons on a very windy day in front of Canada house with moose.

Full house: The incidence and impact of boarding admitted patients in the emergency department

By Marilyn J. Hodgins, RN, PhD,
Nicole Moore, RN, BN, CEN(C), and Laura Legere

Abstract

Increasingly, treatment areas within the emergency department are being occupied by admitted patients while they wait for an inpatient bed to become available. In this paper, the frequency with which admitted patients are boarded in the emergency department, factors contributing to the occurrence of ED boarding and its impact on patient outcomes are examined through a retrospective review of administrative data.

Crowded conditions and long wait times are occurring with increasing frequency in many emergency departments (EDs). The holding or boarding of admitted patients has been identified as a major contributing factor because it creates a bottleneck situation that disrupts the flow of patients into and out of the department (Hoot & Aronsky, 2008; Bradley, 2005; Canadian Institute of Health Information, 2007). Given this, practice changes that extend beyond the walls of the emergency department are required to effectively deal with this situation. However, to effect such change, evidence must first be acquired that demonstrates the nature and scope of the problem. Our goal in this research project was to take a closer look at the practice of boarding admitted patients in one Canadian emergency department by examining the frequency with which it occurred, factors contributing to its occurrence and its impact on emergency patients who are subsequently admitted to hospital, as well as those who are treated and released.

The seeds for this project were planted during a chance conversation with Nicole, who is the nurse manager for the emergency department of a 314-bed regional referral hospital. During this conversation, Nicole commented on the increasing number of emergency patients who were being boarded in the department for part or even all of their hospital stays, and her concerns about the effect this was having on patients and staff. She also mentioned that electronic charting had been successfully introduced into the emergency department, which allowed her to monitor trends from her desktop computer. For researchers, the mere mention of an untapped data source tends to induce an episode of paroxysmal supraventricular tachycardia. I left the meeting with visions of data fields dancing in my head. What transpired was a series of meetings during which we identified a number of questions pertaining to the boarding of admitted patients; reviewed the published research on this issue; consulted with a health information analyst to determine the feasibility of merging data from patients' emergency and hospital electronic records; obtained administrative permission to access the data; and secured ethical approval for the project from the local university and regional health authority. Once these steps were completed, we gained access to an electronic file with administrative data for 44,102 ED visits made by 28,075 people between September 1, 2005, and August 31, 2006. Approximately 44% of the cases were for people who accessed the emergency department only once in the 12-month period. Ten per cent of the visits were made by people who accessed the department more than five times. Eleven people accessed the emergency department more than 20 times, with one person seeking care on 50 separate occasions.

Question: What was the typical patient flow pattern in 2005–2006?

On an average day, 120 people accessed the emergency department. However, daily patient volumes fluctuated between 94 and 158. Little difference was observed in the percentage of people who accessed the emergency department by day of the week (percentages ranged from 13% of cases presenting on a Saturday to 15% on a Monday). The majority of people presented to the emergency department during the day or evening shifts (79%). Although cases ranged in age from 0 (delivered in the department) to 102 years, the average age of emergency patients was 40 years. Approximately two-thirds (65%) of the ED visits were by people between the ages of 17 and 64 years. Slightly more than half of the visits were made by females (53%) and were triaged as less urgent or non-urgent (55%) using the Canadian Triage and Acuity Scale (CTAS) (Bevridge et al., 1998). Thirty-seven per cent of cases were triaged as urgent.

Question: Which emergency cases resulted in hospitalization?

Seventeen per cent of cases (n = 7,606) resulted in a hospital admission. On average, there were 21 admissions per day (range nine to 34). Age was a significant predictor of hospital admission,

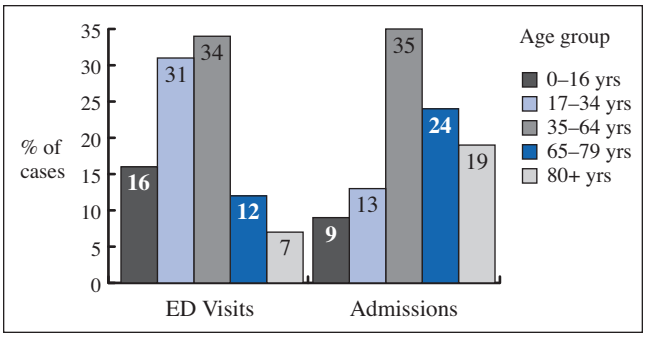

Figure One. Boxplot: Percentage of emergency department visits and hospital admissions by age group.

as evidenced by the fact that although people 65 years of age and older constituted only 19% of the total ED visits, they represented 43% of all admissions (Figure One). Even more notable is that half of all patients 80 years of age or older who presented to the emergency department were eventually admitted to hospital. Although patients presented with a wide range of health problems, the five major diagnostic groupings for admitted patients were gastrointestinal, cardiac, lower respiratory, musculoskeletal, and symptoms not yet diagnosed (Hodgins, Moore, & Legere, 2010). Almost half (48%) of the admitted cases were coded as medical based on their presenting complaint and admitting diagnosis. Ten per cent of the admitted cases were eventually transferred to a critical care unit.

Question: What factors contributed to the ED boarding of admitted patients?

Following receipt of an admission order, some patients remained in the department for up to 3.6 days before being transferred to an inpatient bed. Fourteen per cent of admitted patients (n = 1,031) were admitted and discharged from the emergency department. The Canadian Association of Emergency Physicians and the United States' Agency for Healthcare Research and Quality have both developed position statements in which boarded patients are defined as those patients for whom the interval between the decision to admit and their physical departure from the emergency department exceeds 120 minutes (Agency for Healthcare Research and Quality, n.d.; Canadian Association of Emergency Physicians, 2007). Using this definition, more than half (54%) of the admitted patients were classified as boarded, as they waited more than two hours for transfer to an in-hospital bed. On an average day, 11 admitted patients were boarded for more than two hours. There was only one day during the year that no admitted patient was held for more than two hours (February 18, 2006, which also had the lowest reported number of ED visits).

A moderate positive association (Spearman's rho [rs] = .37) was observed between the number of patient visits per day and the number of admitted cases, indicating that there tended to be more admissions on days with higher patient volumes. An even stronger positive association was observed between the number of admitted cases and the number boarded for more than two hours (rs = .66). These associations have workload implications, as they suggest that on days with high patient volumes emergency nurses not only were dealing with more patients in general, but also more admission and, subsequently, more boarded patients.

Table One. Proportion of cases meeting CTAS fractile response rates for time to physician assessment

Triage Level	Fractile Response Rates		
	Target Time	CTAS Target %	Observed %
Resuscitative	Immediate	98%	90%
Emergent	≤ 15 minutes	95%	54%
Urgent	≤ 30 minutes	90%	29%
Less Urgent	≤ 60 minutes	85%	28%
Non-Urgent	≤ 120 minutes	80%	63%

Patients with medical conditions tended to be boarded in the emergency department for longer periods than other admission types. More than half (69%) of the patients admitted with medical problems were boarded for more than two hours. Approximately 36% of the patients admitted to a critical care unit were boarded. However, a significant difference was observed between boarding times for patients admitted to the coronary versus intensive care unit, as 42% of patients awaiting transfer to the coronary care unit were boarded for more than two hours versus 14% of those admitted to the intensive care unit. Interestingly, the shortest boarding times were observed for patients awaiting transfer to the psychiatric unit. One possible explanation for this finding is the presence of a psychiatric nurse in the emergency department. The role of this nurse is to facilitate the assessment and management of patients presenting with psychiatric-related problems and to serve as a liaison between the two areas.

An analysis was conducted to examine whether the likelihood of being boarded for more than two hours could be predicted solely by factors specific to the type of admission (i.e., medical, surgical, critical care, or other speciality) and time of presentation (i.e., weekend versus weekday and day, evening or night shift), or whether patient characteristics (sex and age group) also played a role. Results suggest the likelihood of boarding was highest for those who were medical admissions and admitted on a weekday or during the night shift. However, even after accounting for these factors, patient characteristics improved the ability to predict ED boarding. Females and those over 65 years of age were more likely to be boarded (Hodgins, Moore, & Legere, in press).

Question: What effect does ED boarding have on patient outcomes?

To examine the effect of ED boarding on outcomes for emergency patients in general, an analysis was conducted to determine the proportion of cases per day for which the CTAS response rates were met for time to physician assessment (Bevridge et al., 1998). As evidenced by Table One, less than 30% of urgent and less-urgent cases were seen by a physician within the timeframes recommended by CTAS. These percentages are much lower than the target fractile response rates of 90% and 85%. The association between the proportion of cases per day seen by the physician within the recommended response time and the number of boarded patients was examined for each triage level. Only one statistically significant association was observed: a weak negative association between the number of boarded patients and the proportion of less-urgent cases seen by a physician within the recommended time (rs = -.17), suggesting that the proportion of cases tended to be lower on days with more boarded patients. One explanation for the relative lack of significant associations between these variables is that boarded patients primarily affect nurses' work.

To examine the effect of ED boarding on outcomes for admitted patients, an analysis was conducted to compare length of hospital stay for the five most common diagnostic categories (i.e., gastrointestinal, cardiac, lower respiratory, musculoskeletal, and symptoms not yet diagnosed) by occurrence of ED boarding. Statistically significant differences were observed for three of the five diagnostic groups. The median length of hospital stay was significantly longer, by one or more days, for patients boarded for more than two hours for those with gastrointestinal, lower respiratory and musculoskeletal conditions (Hodgins, Moore, & Legere, 2010).

Finally, we attempted to compare the rates of post-admission complications by the occurrence of ED boarding. Data for post-admission complications are currently based on information retrieved from physicians' discharge notes. Complications were documented for only 6% (479 of the 7,607) of the patients admitted to hospital from the emergency department. The number of complications reported for these cases ranged from one to four, resulting in a total of 602 complications. The most common complications were infections (40%), pulmonary complications (22%), treatment complications (21%), cardiac complications (15%), and skin breakdown (8%). (Note: percentages do not total 100 as some cases had more than one documented complication.) Post-admission complications were more likely to be reported for older patients. Patients 80 years of age and older were three times more likely to have a reported complication than middle-aged adults. Type of admission was also a significant predictor in that patients admitted to a medical unit were less likely to have a reported complication, and those admitted to a critical care unit were more likely to have a reported complication than those admitted to a surgical unit. Results of our analysis did raise questions as to the completeness of the data. For example, only 37 incidents of skin breakdown were reported, suggesting an incidence rate of 8%. This number is unexpectedly low given that 1,459 of the admitted patients were 80 years of age or older. It is also lower than the rate of 14% that was reported following a hospital-wide assessment of pressure ulcer prevalence and incidence conducted in 2006 (Esligar & Schuttenbeld, 2006).

Question: Where to from here?

This project has been a learning experience, as we attempt to create a functional research partnership. Results of this project have provided Nicole with some evidence to assist in her efforts to increase awareness of the problems associated with the ED boarding of admitted patients. However, as often occurs in a research project, we have ended up with more questions than we had in the beginning. Plans are underway to replicate this project to address these new questions and to determine whether the observed patterns have continued over time. Nicole predicts that we will find the incidence of ED boarding has actually increased.

Work on this project was facilitated by the availability of a pre-established definition for ED boarding. However, in our review of the literature, no study was found that operationalized ED boarding using the cut-point of two hours. Efforts to accumulate a body of evidence to support policy and practice changes would be facilitated not only by use of a common definition of ED boarding, but also a common set of clinically meaningful outcomes. Since boarded patients primarily affect the work of emergency nurses, we encourage NENA members to work to establish standards for research in this area. The upcoming NENA conference to be held in Saint John this May would provide an excellent venue to advance such work. With hospital occupancy rates in Canada averaging 89% (Organisation for Economic Co-operation and Development, 2009), it is doubtful that the situation of ED boarding will change without strong evidence demonstrating the effect of this practice on patient outcomes.

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Twilight in the emergency department: Porphyria, mad kings, vampires and werewolves? A brief review

By Mark Mastin

Overview

The porphyrias are a group of disorders of the heme biosynthesis pathway (also known as the porphyrin pathway) that present with acute neurovisceral symptoms or skin lesions or both. Diagnosis is difficult and they are often missed or wrongly diagnosed (Thadani, Deacon, & Peters, 2000). Acute attacks may present with symptoms including severe abdominal pain (Anderson et al., 2005), hysteria (Millward, Kelly, King, & Peters, 2005), and motor neuropathies (weakness). As there is a very characteristic discrepancy between the serious complaints and the actual clinical findings, these patients can present a challenge to the emergency nurse (Liu et al., 2005; Tasnadi, Bor, Pusztai, & Szekely, 2003).

The name porphyria is derived from the Greek πορφύρα, *porphyra*, "purple pigment". The name is believed to have been a reference to the purple discolouration of feces and urine in patients during an attack (Lane, 2002).

Porphyrias are classified as acute (also known as hepatic) or chronic (also described as cutaneous or erythropoietic) (Forbes & Jackson, 1997).

Pathophysiology

Porphyrins is a group of organic compounds that occur in most living cells in both animals and plants. They are combined with metals such as magnesium in the plant kingdom to produce chlorophyll, and with iron in the animal kingdom to produce heme (Tobe, n.d.). Heme is critical for oxygen binding and transport for the cytochrome P-450 pathway, for activation and decomposition of hydrogen peroxide, for oxidation of tryptophan and prostaglandins, and for the production of cyclic guanine monophosphate (cGMP).

Heme is synthesized mostly in the bone marrow (85%) by erythroblasts and reticulocytes. Heme is also synthesized in the liver (15%) where it is primarily used for cytochromes and peroxisomes. Heme synthesis requires eight enzymes (Figure One). A deficiency or defect in any of the last seven enzymes of the heme biosynthetic pathway may result in its substrate, and any other heme precursors normally modified by that enzyme, accumulating in bone marrow, liver, skin, or other tissues producing toxicity.

Porphyrias can be inherited or (rarely) acquired (Champe & Harvey, 1994). With the exception of congenital erythropoietic

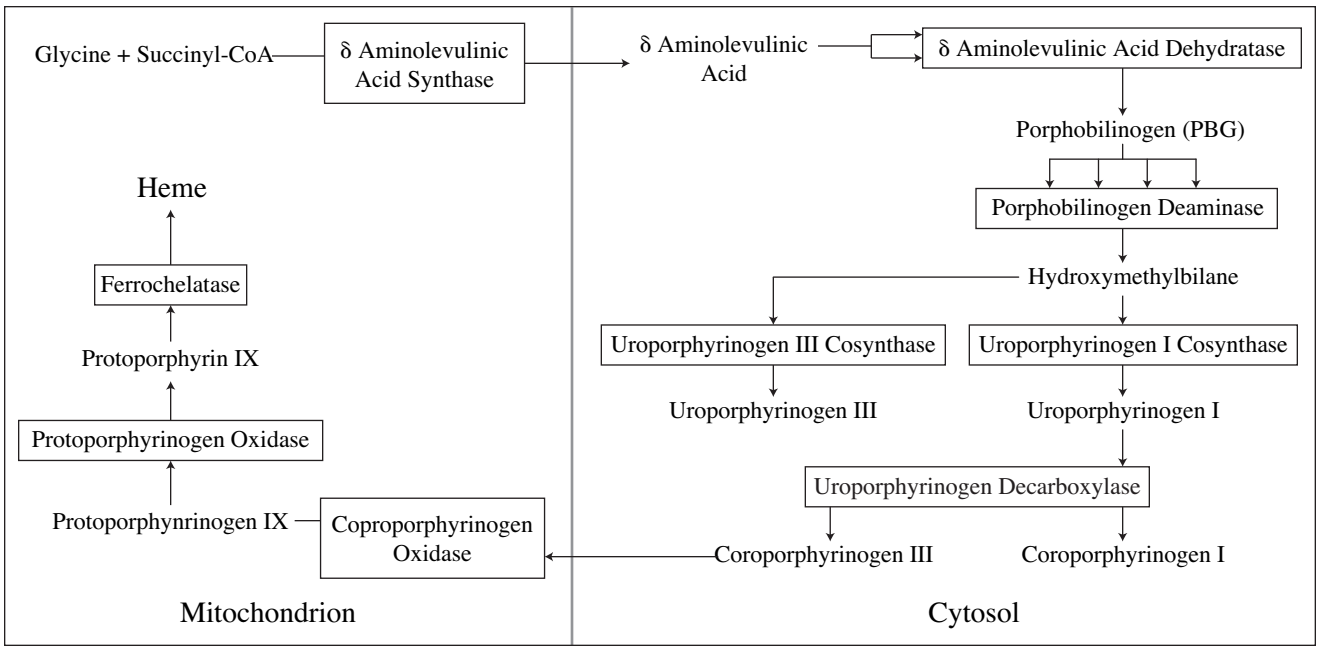

Figure One.

porphyria and aminolevulinate dehydratase deficiency porphyria, which are autosomal recessive, all other porphyrias are inherited as autosomal dominant disorders. The majority (an estimated 80% within families) of those who inherit an autosomal dominant porphyria remain asymptomatic; this is referred to as latent or presymptomatic porphyria. In acute intermittent porphyria, out of 100 patients with the genetic defect, perhaps 10 to 20 secrete excess porphyrin precursors and only one to two has symptoms (European Porphyria Initiative, 2003–2008).

The classic inducers of symptomatic porphyria are chemicals or situations that boost heme synthesis. This includes fasting, alcohol, endocrine factors, infection, smoking and many medications. Although very large lists of "safe" and "unsafe" drugs exist, many of these are based on anecdotes or laboratory evidence (Gorchein, 1997). In general, drugs that lead to increased activity of the hepatic P450 system, such as phenobarbital, sulfonamides, estrogens, and alcohol, are associated with porphyria. However, many attacks occur without any obvious provocation.

Prevalence

Acute porphyrias

The combined prevalence of the acute porphyrias is estimated at approximately five cases per 100,000 persons (Anderson, Sassa, Bishop, & Desnick, 2001) in the U.S. Prevalence of acute intermittent porphyria can be as high as 60 to 100 cases per 100,000 in northern Sweden (Bylesjo, Wikberg, & Andersson, 2009).

Cutaneous porphyrias

The United States has an estimated four cases per 100,000. Internationally, rates vary from 0.7 per 100,000 for hereditary coproporphyria in Israel to 34 per 100,000 in South Africans of Danish decent for variegate porphyria (Kirsch, Meissner, & Hift, 1998). Porphyria cutanea tarda is the most common porphyria—its prevalence is one in 25,000 in the U.K. (Elder, Smith, & Smyth, 1990).

Clinical manifestations

Clinical manifestations depend on the step in which the enzymatic defect occurs. If the enzymatic defects are in the initial steps of the metabolic cascade, early metabolic intermediates will accumulate, which are responsible for attacks of neurologic dysfunction. If the enzymatic defects are in the final steps, sunlight-induced cutaneous lesions (photosensitivity) due to porphyrin accumulation in the skin will develop (Canavese, Gabrielli, Guida, & Cappellini, 2002).

This photosensitivity is related to the fact that the protoporphyrin molecule has the ability to store radiant energy, usually ultraviolet light with a wavelength of about 400 nm. For the most part, this radiant energy is derived from exposure to bright sunlight. This energy build-up within the cells can damage the subcellular structures (Tobe, n.d.).

Acute porphyrias

The acute porphyrias are characterized by periodic acute attacks of neurovisceral symptoms and may stay occult for a long time. The three major disorders in this group are acute intermittent porphyria, hereditary coproporphyria, and variegate porphyria. Attacks are clinically indistinguishable in the three syndromes. The commonest is acute intermittent porphyria (Neuromuscular Disease Center, Washington University, n.d.).

Doss porphyria (aminolevulinate dehydratase deficiency porphyria), the fourth in this group, is extremely rare—a total of five cases reported in the literature by 2004 (Doss et al., 2004).

These porphyria syndromes are characterized by (Thadani et al., 2000):

- Psychiatric symptoms, such as hysteria, restlessness, psychosis (Ellencweig, Schoenfeld, & Zemishlany, 2006), insomnia or anxiety (Millward et al., 2005).
- Abdominal pain can resemble an acute abdomen and occurs in 95% of attacks (Kauppinen, 2005).
- Peripheral neuropathies, predominantly motor, can mimic Guillain-Barré syndrome. This may cause respiratory failure requiring mechanical ventilation.
- Coloured (dark or red) urine.
- Autonomic disturbance can cause nausea, vomiting (80%) and constipation.
- Central nervous system signs may consist of seizures (2.2% to 5.1%) (Bylesjo, Forsgren, Lithner, & Boman, 1996), mental status changes, cortical blindness, and coma.
- Sympathetic over-activity causes tachycardia (30% to 80%), arrhythmias, hypertension (50%) and postural hypotension.

Chronic porphyrias

The chronic or cutaneous porphyrias are dermatologic diseases that may or may not involve the liver and nervous system and do not present with acute attacks, as described for the acute porphyrias above. They may be chronic with only minimally bothersome intermittent problems that develop gradually over months and persist for years (Tobe, n.d.). These syndromes include congenital erythropoietic porphyria, erythropoietic porphyria, and porphyria cutanea tarda.

Patients may present with skin fragility, erosions, vesicles, bullae, and milia in sun-exposed areas of the skin. Sometimes, there is the presence of periorbital mottled hyperpigmentation and hypertrichosis, sclerodermoid changes, and ulceration.

Pseudoporphyria

Pseudoporphyria describes a bullous photosensitivity that clinically and histologically mimics porphyria cutanea tarda. However, no demonstrable porphyrin abnormalities are present. The commonest etiology is ingestion of various medications, such as Voriconazole (Tolland, McKeown, & Corbett, 2007), Nalidixic acid (Zelickson, 1964), and Furosemide (Burry & Lawrence, 1976). Ultraviolet A (UVA) exposure from sunbeds (Stenberg, 1990) and hemodialysis have also been implicated.

Treatment

- Oral and intravenous glucose suppresses the activity of aminolaevulinic acid synthase (the first enzyme in the heme pathway) and, therefore, reduces the overproduction of porphyrins and the precursors formed prior to the enzyme block (Li, 2005). At least 300g to 400g should be given in 24 hours. This may terminate mild attacks (Thadani et al., 2000).
- Meperidine or morphine parenterally to treat pain.
- Phenothiazines such as chlorpromazine can be used for nausea, vomiting, anxiety and restlessness.
- Propranolol or Nadolol, which can be safely used for beta blockade to treat tachycardia and/or hypertension.
- Magnesium (Sadeh, Blatt, Martonovits, Karni, & Goldhammer, 1991) and Gabapentin are used to treat seizures, as most classic antiseizure medicines can lead to acute porphyria attacks.
- Monitor for hyponatremia or hypomagnesemia and treat as needed.
- Institute cardiac monitoring, as arrhythmias are common.
- Hematin (Panhematin) is available in Canada through Special Access Canada for patients experiencing severe attacks, especially those with severe neurologic symptoms (Anderson & Collins, 2006). This provides negative feedback to the heme synthetic pathway and shuts down productions of porphyrins and porphyrin precursors.
- Avoidance of sunlight is the key in treating cutaneous porphyrias.
- Iron depletion can treat several of the cutaneous porphyries. Phlebotomy and apheresis can remove excessive iron in patients with porphyria cutanea tarda. Standard phlebotomy for adults consists of removal of 250 mL to 500 mL of blood once or twice per week (Poh-Fitzpatrick, Honig, Kim, & Sassa, 1992).

Historical and mythological aspects

Vampires and werewolves

Some vampire and werewolf legends have been thought to have arisen from porphyria, as there are certain similarities between the symptoms of the condition and folklore.

These theories have resulted in sometimes-acrimonious debate. Some claim that it sensationalizes the disease and stigmatizes the sufferers.

There have been associations drawn since the 15th century, but the first scientific paper was "On Porphyria and the Aetiology of Werewolves" (L. Illis), which was published in the Proceedings of the Royal Society of Medicine in January 1964. The 1973 book, "Vampires", by Nancy Garden presented arguments for a link between porphyria and the belief in vampires.

Biochemist David Dolphin's 1985 paper, "Porphyria, Vampires, and Werewolves: The Aetiology of European Metamorphosis Legends", published by the American Association for the Advancement of Science, received much media attention, popularizing the connection. Another important source for those interested in the subject is Norine Dresser's "American Vampires: Fans, Victims, Practitioners (1989)".

A cornerstone to the theory, the perceived harmful effect sunlight had on vampires, is, in fact, a recent addition to vampire lore. It originates from a 1922 German vampire film "Nosferatu, eine Symphonie des Grauens" (Nosferatu: A Symphony of Horror).

Mad kings

King George III of England had symptoms of abdominal pain, rashes, reddish urine, and psychotic episodes that are consistent with porphyria, although the account is disputed by many (Cooper & Powell, 2006).

The first suggestion that a physical illness was the cause of King George's mental derangements came in 1966, in a paper "The 'insanity' of King George III: A classic case of porphyria" (Macalpine & Hunter, 1966), with a second paper 1968, "Porphyria in the royal houses of Stuart, Hanover and Prussia" (Macalpine, Hunter, & Rimington, 1968). Many psychiatrists disagreed with the diagnosis, suggesting bipolar disorder as far more probable.

It has also been suggested that King Nebuchadnezzar of Babylon suffered from some form of porphyria (cf. Daniel 4) (Beveridge, 2003), as well as the proposal that Vincent van Gogh may have suffered from acute intermittent porphyria (Loftus & Arnold, 1991).

About the author

Mark Mastin moved to the Annapolis Valley from Calgary about a year ago. Mark is the assistant manager for emergency. He has spent the last 20 years working in large urban emergency departments—prior to that, he worked in various ICUs and a burn unit. He lives with his wife, four children, two dogs and a rabbit named "Calypso". He enjoys the peace and serenity of the emergency department.

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A visit to the R Adams Cowley Shock Trauma Center, University of Maryland Medical Center, Baltimore, Maryland

By Carole Rush and Shelley Pidruchney

We were fortunate to go on a tour of the R Adams Cowley Shock Trauma Center (known simply as University of Maryland Shock Trauma Center) in Baltimore, Maryland, in conjunction with the 2009 fall scientific assembly of the Emergency Nurses Association (ENA). As two nurses who dream of studying/working at this world-renowned facility, we were excited to have a tour.

History

Our tour was conducted by various staff members (nurses, public relations officer, hyperbaric chamber staff and flight staff) to give us access to most of the facility. We started with a formal presentation of the history of the development of this institution (Table One). Dr. R. Adams Cowley (1917–1991) was the driving force behind the creation and development of the shock trauma center. He described shock as "a momentary pause in the act of death" and was determined to make the process reversible. He coined the concept of the "Golden Hour" of initiating treatment for severely injured patients that we still use today. Dr. Cowley explained his theory as follows: "There is a golden hour between life and death. If you are critically injured, you have less than 60 minutes to survive. You might not die right then—it may be three days or two weeks later, but something happened in your body that is irreparable" (University of Maryland, 2001). Dr. Cowley spent the later part of his career influencing and negotiating the development of the Maryland trauma system, of which shock trauma is the cornerstone. At present, $11 of every driver's licence fee in Maryland goes toward funding the Maryland Trauma System.

Table One. Developmental history of the Shock Trauma Center (Source: www.umm.edu/shocktrauma/history.htm)

Date	Events
1945–1960	Dr. R. Adams Cowley's work as a pioneer in open-heart surgery, prior to use of heart-lung machine U.S. Army awards Dr. Cowley a grant for $100,000 to study shock in humans
1961	Two-bed clinical research unit opened, called the "Death Lab". Patient referrals who were dying from shock
1967	State-wide EMS system plans for Maryland
1969	Creation of the original 32-bed Center for the Study of Trauma
1970	First civilian lands on helipad, down seven floors, then over to separate Shock Trauma building
1973	Governor of Maryland issues an executive order establishing the Center for the Study of Trauma as the Maryland Institute for Emergency Medicine
1989	New R Adams Cowley Shock Trauma Center (eight storeys) with state-of-the-art equipment opened, with the philosophy, "Build it and they will come"

Patient access

The current facility is a free-standing trauma hospital centre, and is part of the University of Maryland Medical Center (UMMC) (Figure One). All patients arrive by either ground ambulance (Figure Two) or helicopter (Figure Three) from all over the state of Maryland. Impressive to note, there is a fleet of 12 helicopters to provide pre-hospital critical care and transport of patients to Shock Trauma. We noticed that there are no public entrances from the outside to Shock Trauma. A "walk-in" or "drop-off" trauma patient who presents to the emergency department of UMMC would have to be transferred to Shock Trauma.

Figure One. R Adams Cowley Shock Trauma Center. ***(Photo Courtesy of MIEMSS)***

Flow of patient care

Patients are first transported to the Trauma Resuscitation Unit (TRU) (Figure Four) where a multidisciplinary team performs initial assessment and stabilization. The TRU is a locked unit and never on diversion. Nurses who work in the TRU must have extensive critical care experience. The TRU has the most detailed trauma flow sheet (10 pages) we have ever seen! Depending on the situation, patients are then taken to either one of six operating rooms (adjacent to the TRU) or upstairs to one of the inpatient units. There are several floors of inpatient intensive care and intermediate care and several specialty units caring for traumatic brain injury, spinal cord-injured patients and those with complex musculoskeletal injuries. Rehabilitation takes place at other facilities.

Figure Two. Carole and Shelley outside the ambulance bay.

Figure Three. Carole and Shelley on the rooftop helipad.

Shock Trauma boasts a 97% survival rate to discharge and has a large organ donation program. Table Two outlines the resources that are available at all times.

Patient population and testimonials

Shock Trauma is an adult facility. Pediatric patients are treated at Johns Hopkins Hospital and burn patients are cared for at Johns Hopkins Bayview Medical Center. The patient population is beginning to expand to include critically ill patients with complicated wounds, sepsis and necrotizing fasciitis. The facility's website has a wealth of trauma resources, but the most powerful information is the collection of patient stories and testimonials at http://www.umm.edu/shocktrauma/patient_stories.htm

Figure Four. Trauma Resuscitation Unit (TRU).

Table Two. Services available on site, 24/7 at Shock Trauma Center

Trauma Resuscitation Unit
Trauma Surgeons and ORs (x 6) always ready
Anesthesia
Neurosurgery
Orthopaedics
Specialty nurses and support staff
Radiology / CT
Angiography
STAT Lab (results within 10 minutes)
Blood Bank (10 units 0+, 4 units 0-)
Pharmacy
Recovery Room
Critical Care Units
Intermediate Care Units
Acute Care Units
Pastoral Care

Hyperbaric chamber

The hyperbaric chamber at Shock Trauma is huge—it could treat up to 23 patients at one time! The chamber can be separated into three sections, each with different "dive" conditions. A physician trained in hyperbaric medicine is on site at all times (Figure Five). Nurses care for a wide variety of patients inside the chamber (Figure Six), from ambulatory patients with wounds to critically ill ventilated patients. Referrals are again from the entire state of Maryland.

Research and educational opportunities

The Shock Trauma Center is the principal trauma care teaching site for the state of Maryland and the "hub" for trauma clinical research. People come from all over the world to learn and work there. The United States Air Force has a teaching program for trauma at this facility known as the Center for the Sustainment of Trauma & Readiness Skills (C-STARS). Information on the variety of physician, nursing and nurse practitioner educational programs can be accessed at http://www.umm.edu/shocktrauma/pcs_education.htm.

Shock Trauma recently received the prestigious Magnet Hospital designation. The Magnet Recognition Program® was developed by the American Nurses Credentialing Center (ANCC) to recognize health care organizations that provide nursing excellence. The program also provides a vehicle for disseminating successful nursing practices and strategies (American Nurses Credentialing Center, 2010).

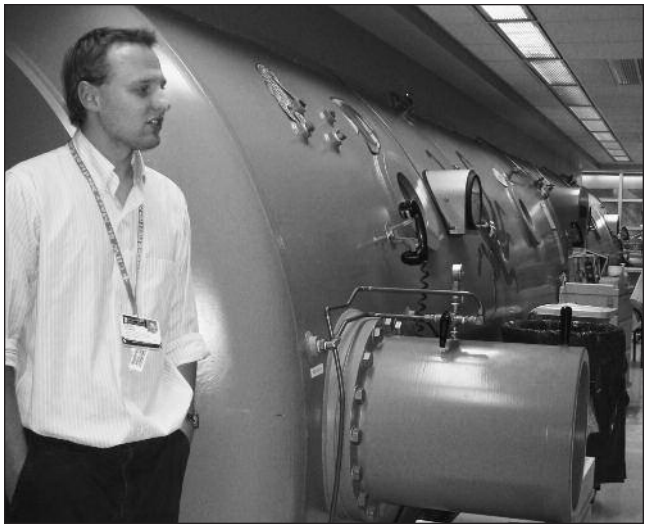

Figure Five. Outside of hyperbaric chamber.

Figure Six. Inside of hyperbaric chamber.

Many of the staff at the Shock Trauma Center have shared their knowledge and skills in areas of need such as war-torn Afghanistan and after the large earthquake in China. Detailed information about research at Shock Trauma can be found at http://www.umm.edu/shocktrauma/trauma_research.htm

Injury prevention programs are strong

The main focus of Shock Trauma is clinical patient care, but staff also has a strong belief in injury prevention. Injury prevention programs are conducted through a strong partnership with the American Trauma Society. A strong focus of such programs is violence prevention.

What's with the pink scrubs?

We noticed that clinical staff that works at Shock Trauma wears pastel pink scrubs (Figure Seven), and learned that pink was chosen as the colour for trauma staff. This made them unique and distinctive from the rest of the hospital.

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University of Maryland Shock Trauma Center

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Figure Seven. Everyone wears pale pink scrubs!

Comforting babies in pain

Reprinted with permission from BC Children's TeamWorks, January 13, 2010.

Submitted by Sharron Lyons

Babies feel pain, but how are health care providers managing that pain during a procedure? Literature shows that pain associated with acute care procedures in infants and children is often managed poorly.

B.C. Children's and B.C. Women's is one of eight centres across Canada in a national study about pain assessment and management in infants and children. CFRI members Drs. Anne Synnes and Fay Warnock are the site investigators for the Canadian Institutes of Health Research study.

B.C. Children's inpatient units 3M and 3R are control groups. PICU and NICU are intervention units, where a pain practice change is introduced and evaluated.

"We're helping the NICU staff and families provide non-pharmacologic comfort measures to infants during routine painful procedures, including heel pricks for collecting blood, starting IVs and having a breathing tube in the airway," says Alison Drummond, Research Nurse. "Babies lack the ability to comfort themselves, so these procedures cause pain and leave them disoriented. Comfort measures like providing skin-to-skin care, a soother, or facilitated tucking—which is placing still hands on the infant's head and torso with gentle but firm pressure—can keep babies calm".

The research team also works with lab staff to ensure nurses or family members can use the comfort measures before, during and after a blood collection. This collaboration is vital to the research.

"Through knowledge sharing," says Alison, "we're supporting care providers to improve their pain management practice by using tools that research has shown to be effective in decreasing infants' discomfort."

Sexual assault and alcohol use: Where should intervention begin?

By Sue Robb

Abstract

Sexual assault nurse examiners and other advocates who provide specialized care to victims of sexual assault recognize the role that alcohol plays in sexual assault. Conservative estimates indicate that approximately 50% of sexual assaults occur under the influence of alcohol, making the issue of alcohol use a significant vulnerability issue. The question has been raised in current literature about the feasibility of addressing the problem of alcohol abuse in the emergency department (ED) during the sexual assault exam. Although the opportunity exists for an intervention due to the dedicated nature of the SANE programming, is the ED an appropriate venue for such an intervention? The potential for discussion on voluntary alcohol consumption being perceived as victim blaming and concerns with what can be cognitively processed during the acute phase of crisis requires closer scrutiny before intervention models are established.

Alcohol is the number one drug used to facilitate sexual assault (Ledray, 2008; Madea & Mußhoff, 2009). It serves to facilitate victimization, perpetration, re-victimization and a tendency for ongoing alcohol abuse (Abbey, McAuslan, Zawacki, Clinton, & Buck, 2001; Benson, Gohm, & Gross, 2007; Gidycz et al., 2007; Kilpatrick, Acierno, Resnick, Saunders, & Best, 1997; Kilpatrick et al., 2003; Miranda, Meyerson, Long, Marx, & Simpson, 2002). As many sexual assaults go unreported, a conservative estimate of sexual assault prevalence suggests that 25% of adolescent or adult American women have experienced sexual assault (Abbey, Zawacki, Buck, Clinton, & McAuslan, 2001). Of these known sexual assaults, approximately one-half of the victims report that they were drinking alcohol at the time of the assault (Abbey, McAuslan, et al., 2001), and research has indicated that heavy episodic drinking is the greatest risk factor for alcohol-related sexual assault (Mohler-Kuo, Dowdall, Koss, & Wechsler, 2004).

Sexual assault nurse examiners (SANEs) clearly recognize the contribution of alcohol in creating an environment of vulnerability for the victims of sexual assault. Despite our understanding that alcohol use can function as both a risk factor and consequence of sexual assault (Benson et al., 2007; Kaysen, Neighbors, Martell, Fossos, & Larimer, 2006; Kilpatrick et al., 1997; McCauley et al., 2008) and that once victimized there is a greater chance for revictimization (Gidycz et al., 2007; Turchik, Probst, Irvin, Chau & Gidycz, 2009), these risks are typically not addressed by those who first respond to the sexual assault (Cole & Logan, 2008). Vulnerability is clearly an important issue. However, this aspect of emotional care is allocated to other sexual assault advocates and support services through SANE referrals or recommendations at discharge. Unfortunately, most victims do not follow through on the supportive services that they need, (Boykins & Mynatt, 2007; Ledray, 2008; Nesvold, Friis, & Ormstad, 2008). Therefore, the time spent one-on-one with the SANE in the ED may be the only intervention that the victim receives. At this point, what can realistically be done to address the issue of alcohol and vulnerability for sexual assault?

Alcohol and sexual assault is a vulnerability issue that is well understood, but poorly addressed. As Ledray (2008) suggests, SANEs are in an excellent position to address alcohol-induced vulnerability, but the fear of having concern construed as blaming the victim has prevented an effective approach for dealing with this issue. Cole and Logan (2008) suggest that the way to address the issue of substance abuse in the immediate aftermath of sexual assault is controversial, and with legitimate concern. Self-blame is more likely to occur when victims have been under the influence of alcohol and believe that they have contributed to the assault (Abbey, 2002). It has also been found that alcohol use is perceived by others as contributing to responsibility for the assault by the victim (Sims, Noel, & Maisto, 2007). Therefore, while maintaining an emphasis on avoiding revictimizing by suggesting blame, what information is central to the issue that can be retained at a single point of intervention, and what can be cognitively processed by the victim at this point of crisis?

Alcohol's influence on sexual assault

The fact that alcohol consumption and sexual assault co-occur frequently suggests some type of causal pathway. Abbey (2002) poses several attitudinal and situational factors that interact with alcohol consumption as explanations for the relationship between alcohol and sexual assault, particularly in the realm of acquaintance sexual assault. Abbey (2002) has identified

alcohol's influence on sexual assault as involving personal beliefs and expectancies about alcohol, deficits in cognitive processing and motor control, and peer group norms that encourage drinking.

Alcohol beliefs and expectancies

Alcohol expectancies strongly influence the use of alcohol and have been associated with sexual victimization (Corbin, Bernat, Calhoun, McNair, & Seals, 2001). The expectation that alcohol will diminish sexual inhibition and positively enhance a social or sexual experience (positive alcohol outcome expectancy) often leads to increased drinking in potentially sexual situations and, for some, may also provide an "excuse" for sexual risk-taking behaviour that would otherwise not be acceptable (Pumphrey-Gordon & Gross, 2007). Corbin and colleagues (2001) have found that women who hold positive alcohol outcome expectancies are more vulnerable to sexual victimization. They are less likely to attend appropriately to harm or threat cues that are incongruent with their positive expectancies. They are more vulnerable to yield to sexual coercion and tend to offer less resistant refusal responses to unwanted sexual advances. This behaviour may suggest that women who hold strong beliefs about the influence of alcohol may feel that they have little power to alter the course of the social/sexual interactions and succumb to unwanted sexual contact (Pumphrey-Gordon & Gross).

Whereas beliefs and expectations associated with alcohol consumption increase the risk of vulnerability to the victim, they also have a causal influence on the perpetrators of sexual assault. Expectations of alcohol's effects (feeling more powerful or more sexual), stereotypical beliefs about women who drink, and perceiving alcohol a sexual signal, may be factors that encourage men to interpret a spurned sexual advance as an invitation to become increasing more persistent (Abbey, 2002). For the perpetrator, the consumption of alcohol may be construed as a viable excuse for sexual assault (Abbey, 2002). However, perpetrators of sexual assault are legally and morally responsible for sexual assault regardless of levels of intoxication or beliefs that they were somehow "led on". In Canada, self-induced intoxication cannot be used as a viable defence for perpetration of sexual assault (Minister of Justice, 2010).

Deficits in cognitive processing and motor control

Alcohol consumption impairs cognitive processes and facilitates the misperception of ambiguous messages, ones that may convey sexual intent or subtle cues of threat (Steele & Josephs, 1990). Steele and Josephs have labelled this phenomenon "alcohol myopia," or "short sighted-information processing" (p. 922). Essentially, alcohol prevents the drinker from responding normally to incoming cues by narrowing the range of cues that can be processed, as well as impeding one's ability to extract the meaning from the perceived cues. It also interferes with one's ability to plan and implement an effective escape strategy (Abbey, 2002). In a social situation, a woman is less able to perceive the presence of threat in a message or situation that may lead to a forced sexual contact or sexual assault (Abbey, Clinton-Sherrod, McAuslan, Zawacki & Buck, 2003). According to Abbey (2002), alcohol myopia may lead women to take risks that they ordinarily might not. While in the process of having fun or wanting to be liked, they are less likely to attend to personal safety issues. Alcohol myopia also influences the perpetrator, who may misinterpret friendly or benign female responses as sexual responsiveness, and even a clear verbal or physical rebuff may be construed as a message for a more persistent pursuit (Abbey, 2002).

Alcohol also interferes with motor function, thereby limiting a woman's ability to resist a sexual assault (Abbey, 2002). The notion that sober victims are more able to escape or resist is supported by studies showing that attempted sexual assaults, rather than completed sexual assaults, are more common among sober individuals (Abbey, 2002; Testa, Vanzile-Tamsen, & Livingston, 2004; Ullman & Brecklin, 2000). Sadly, not being able to adequately resist a sexual assault is often seen by women as a failure on their part to be in control of the situation, which contributes significantly to the self-blame associated with sexual assault (Abbey, 2002; Sims et al., 2007).

Peer group norms and binge drinking

Another factor that influences an individual's consumption of alcohol may be peer group norms. Alcohol consumption can be shaped by how an individual perceives the drinking patterns of valued peers, and the misperception that peers are drinking heavily or binge drinking encourages others to engage in similar behaviour (Ham & Hope, 2003; Wechsler & Kuo, 2000). Heavy drinking, particularly binge drinking (four to five drinks in a row), is recognized as a significant problem among college youth (McCauley & Calhoun, 2008; Wechsler, Lee, Kuo, & Lee, 2000) and is a strong risk factor for sexual assault (Mohler-Kuo et al., 2004). Although several mechanisms may influence this alcohol-assault relationship, such as increased exposure to more sexually risky environments and association with heavily drinking men who may be aggressive toward women, it has been found that women who drink heavily have a tendency to underestimate their vulnerability to be a victim of sexual assault. Contributions to this vulnerability may also include a lower risk perception, less need for resistance and a diminished ability to resist (McCauley & Calhoun, 2008).

Despite this awareness of alcohol's contribution to sexual assault, and an increased emphasis on sexual assault prevention programs, particularly at the college level, the effects of these programs on the overall rate of victimization remains unclear. Recent findings suggest that the prevalence of sexual assault has not significantly changed (Casey & Lindhorst, 2009; Casey & Nurius, 2006), and may have increased (Casey & Nurius,

2006). Interestingly, of those studies that reported program efficacy in reducing sexual assault in college women, findings did suggest that programs were not effective for those with a prior history of sexual assault (Rothman & Silverman, 2007; Yeater & O'Donohue, 1999). Similarly, Marx, Calhoun, Wilson and Meyerson (2001) found that prevention programs might not be effective in influencing levels of risk recognition for those previously victimized. Unfortunately, individuals who present to SANEs in the ED are just that group of women who, by virtue of the current assault, have now become that challenging group where the efficacy of education has shown to be questionable. Given this, what can one hope to achieve in the ED? We do know that there has been a significant body of research focusing on brief alcohol-related interventions in acute care and emergency settings that suggest promising outcomes with respect to both alcohol reduction and high-risk behaviour (Barnett et al., 2004; D'Onofrio, Pantalon, Degutis, Fiellin, & O'Connor, 2005; Lau-Barraco & Dunn, 2008; Monti et al., 2007; Monti et al., 1999; Sommers et al., 2006; Sommers & Riback, 2008). These interventions are client-centred, and emphasize empathy, exposing discrepancy in alcohol-related expectancies and supporting self-efficacy for change (Monti et al., 2007). It has been suggested that these types of interventions in the ED capitalize on a "teachable moment" due to recency of the event, the emotional state and probable ambivalence toward alcohol given the current negative consequence of its use (Monti et al., 1999). However, can one assume the same "teachable moment" potential in the instance of sexual assault? Alcohol-related high-risk behaviour with salient negative consequences connotes a degree of blame or responsibility. Alcohol-related sexual assault is about vulnerability and victimization and not blame or responsibility. Addressing the use of alcohol at initial contact, however well intentioned, may be construed as a negative or judgmental reaction by care providers (Ahrens, 2006). This serves to reinforce the victim's perception of self-blame by implying some degree of responsibility for their victimization (Sims et al., 2007; Ullman, Townsend, Filipas, & Starzynski, 2007). Cole and Logan (2008) also suggest that any emphasis on the victim's actions, such as alcohol consumption, may be construed as blaming, particularly at the time of crisis. Thus, even though those who have been sexually assaulted are at an increased risk of developing substance abuse problems (Kilpatrick et al., 1997), or may be at risk of victimization again due to present drinking practices, it may not be not advisable to address issues in the immediate aftermath of a sexual assault.

Conversely, some victims of sexual assault present with self-blame associated with alcohol consumption as a possible influence on the assault, and are looking toward support providers to help them overcome these feelings of self-blame and culpability. Addressing the issue of alcohol use and vulnerability, while clearly communicating that a victim's use of alcohol does not absolve the perpetrator of responsibility for his actions, may help to reduce a victim's self-blame (Cole & Logan, 2008). Pennebaker (1990) suggests that talking about issues where there may be self-blame, rather than ignoring them may facilitate victim recovery, as long as the discussions are framed in a non-judgmental manner. Ahrens (2006) similarly found that when support providers were unable or unwilling to counter disclosures of alcohol-related self-blame, or were inadequate in their responses, victims chose to internalize blame and not seek further help. With self-blame being a possible link to revictimization (Miller, Markman, & Handley, 2007), and Post Traumatic Stress Disorder (PTSD) (Ullman et al., 2007) the responsibility to assuage these feelings is noteworthy.

How, then, to best address this issue of alcohol and sexual assault? Victims present to the ER in what is known as the acute phase, characterized by shock, numbing and disbelief, and it is advised that during this crisis stage, most victims are not ready to engage in interactions that require sustained attention or intense involvement (Kress, Trippany & Nolan, 2003). Thus, engaging in discussion on the interactions of alcohol's influence on sexual assault, as outlined by Abbey (2002), would likely be beyond the victim's processing capability. Furthermore, an in-depth critique of studies on the efficacy of sexual assault programs suggests that there is little valid evidence of the efficacy of a "one shot" educational process, particularly with high-risk individuals such as those with substance use issues, or that behavioural changes, if any, can be maintained (Yeater & O'Donohoe, 1999). We also know that efficacy in revictimization prevention programs requires multiple risk-reduction information exposures, so that victims can cognitively process and retain information (Macy, 2007; Yeater & O'Donohue, 2002). This suggests that a single-point education process to address characteristics that could otherwise be amenable to change, such as alcohol expectancies and beliefs and binge drinking, would be insufficient.

The role of education in the ED, if applicable, should be very simplistic, as there may only be moments at the end of an arduous process where there is an opportunity to move beyond the primary SANE goals of treating medically and collecting evidence. Undoubtedly, the need to address vulnerability is important. However, care must be taken not to overemphasize the victim's capacity to avoid revictimization, as this places undue responsibility on victims for their experience (Macy, 2007) and, as suggested by Yeater and O'Donohoe (1999), may even contribute to feelings of loss of self-efficacy or hopelessness toward future experiences. For those victims who are assuming some responsibility for the assault due to the consumption of alcohol, it is essential that SANE capitalize on this receptivity or "teachable moment" to assuage these feelings. It should be made clear that alcohol consumption by either the victim or the perpetrator cannot justify the socially inappropriate action of sexual assault. However, the influence of alcohol in diminishing one's ability to accurately perceive cues of threat and to effectively resist an assault should be mentioned. This information does not evaluate the victim's drinking behaviours, but does provide information that may later influence either alcohol consumption or the creation of a social safety plan, as a means to reduce vulnerability. Another non-judgmental method of imparting the perils of alcohol and sexual assault may be by

teaching from the perspective of the perpetrator. The effect of alcohol-related sexual beliefs, stereotypes about drinking women, the misinterpretation of sexual intent and inability to interpret signals of rejection may create an awareness by women of the mindset of the sexual predators, encouraging better choices for risk reduction.

Conclusion

Although the attitudinal and situational factors that interact with alcohol consumption to increase the likelihood of sexual assault are amenable to change, in general, it would appear that a brief ED intervention provides a limited opportunity to implement this change (Yeater & O'Donohoe, 1999; Yeater & O'Donohue, 2002). Also, as alcohol is only one risk factor among many that contribute to revictimization (Macy, 2007), such as age, Caucasian race, attending college, on/off campus, use of drugs while intoxicated, belonging to a sorority, peer norms and social environment (Mohler-Kuo et al., 2004), an ED intervention may have no discernible impact on the victim. Because of the many pathways that contribute to sexual assault, a downstream approach such as an ED intervention should only be one of many efforts to address sexual assault prevention. Sexual assault prevention programs typically introduced at the college level should be implemented at middle school, where attitudes and beliefs are forming and peer group norms are being established (Abbey, 2002). Also, as evidence suggests that the etiology of sexual aggression emerges from multiple contexts, including individual, peer and community risks, an ecological prevention model strategy may be a more promising approach to sexual assault prevention (Casey & Lindhorst, 2009). At the point of crisis, however, for those health professionals such as SANE who are addressing prevention of further victimization, appropriate care involves a delicate balance between seizing an opportunity to briefly introduce issues of alcohol-related vulnerability against the risk of contributing to self-blame. As suggested, without an expressed indication of self-blame or responsibility for the sexual assault by the victim, addressing alcohol-related vulnerability may be tenuous and possibly harmful. What appears significant to the process of prevention is multiple information exposure that can only be achieved by rigorous follow-up and counselling once the initial crisis has passed. As indicated previously, poor follow-through on referrals or recommendations upon discharge is an ongoing problem that contributes to the issue of alcohol and vulnerability (Boykins & Mynatt, 2007; Ledray, 2008; Nesvold et al., 2008). Perhaps the role of SANE should not end at the ED, rather should encompass a program that includes facility-based follow-up on accessible referrals and ongoing counselling.

About the author

Sue Robb, RN, BEd, MN, a graduate of the University of Moncton and Dalhousie University and has been in nursing for 30 years. She is in independent practice, but has an interest forensic nursing, particularly sexual assault, and works on a casual basis as a SANE at the Moncton Hospital.

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The NENA Bursary

NENA recognizes the need to promote excellence in emergency care and, to this end, to provide financial aid to its members. NENA will set aside a predetermined amount of monies annually with the mandate of providing a high standard of emergency care throughout Canada. All sections of the emergency nursing team are eligible for consideration including staff nurses, managers and educators.

Applications must be submitted prior to the spring Board of Directors meeting of NENA for review by the standing committee for bursary disbursements. On April 1 of each year the number of bursaries awarded will be determined by the number of registered members per province for that NENA fiscal year i.e.:

1-99 members:	1 bursary
100-199 members:	2 bursaries
200-299 members:	3 bursaries
300-399 members:	4 bursaries
400-499 members:	5 bursaries
500-599 members:	6 bursaries
600 + members:	7 bursaries

One bursary is to be available to NENA Board of Directors members and one bursary per year will be available to an independent member.

Successful candidates can receive a bursary only once every three years.

NENA Bursary application process

Each candidate will be reviewed on an individual basis and awarded a number of points as set out below:

1. Number of years as a NENA member in good standing
- 2 years ..... 1 point
- 3–5 years ..... 2 points
- 6–9 years ..... 3 points
- 10 + years ..... 5 points

2. Involvement in emergency nursing associations/groups/committees:
- Provincial member ..... 1 point
- Provincial chairperson ..... 2 points
- Special projects/committee — provincial executive ..... 3 points
- National executive/ chairperson ..... 5 points

3. Candidates with certification in emergency nursing and/or involved in nursing research will receive an additional five points.

If two candidates receive an equal number of points, the committee will choose the successful candidate. All decisions of the bursary committee are final.

Each application will be reviewed once per spring board meeting.

Preference will be given to actively involved members of NENA and those actively pursuing a career in emergency nursing. Those members requesting assistance for emergency nursing certification, TNCC, ENPC, CATN, as well as undergraduate or post-graduate studies that would enhance emergency care will also receive preference.

Candidates must have completed Forms A, B and C (included with this issue of **Outlook**). The provincial director may forward applications at the spring board meetings.

Any incomplete forms will be returned to the provincial director for correction if possible.

Eligibility
- Current RN status in respective province or territory. (Proof of registration required.)
- Active member in NENA Inc. for at least **two** consecutive years. (Proof of membership required.)
- Working at present in an emergency setting which may include:
  - Emergency department
  - Nursing station
  - Pre-hospital
  - Outpost nursing
  - Flight nursing

Application process

Candidates must complete and submit the following:

a. NENA Bursary application form “A”
b. Bursary reference form “B”
c. 200-word essay
d. Photocopies of provincial registered nurse status and NENA registration

Provincial representative responsibilities:

a. Completes bursary candidate’s recommendation form “C”
b. Ensures application forms are complete before submission
c. Brings to Board of Directors meeting all completed applications

Selection process

The standing committee for bursary disbursements will:

1. Review all applications submitted by provincial representatives and award bursaries based on selection criteria.
2. Forward names of successful candidates to the Board of Directors for presentation.

NENA Bursary application form "A"

Name: _____ Date of Application: _____

Address: _____

Phone numbers: work (_____) _____ - _____; home (_____) _____ - _____; fax (_____) _____ - _____

E-mail: _____

Place of employment: _____

Name of course/workshop: _____

Date: _____ Time:_____ Length of course: _____

Course sponsor: _____Cost of course: _____

Purpose of course: _____

Credits/CEUs: _____ ENC(C) Certified: ❑ Yes ❑ No

Previous NENA Bursary: ❑ Yes ❑ No Date: _____

Please submit a proposal of approximately 200 words stating how this educational session will assist you and your colleagues to provide an improved outcome for the emergency care user: Attached?: ❑ Yes ❑ No

Ensure photocopies of provincial RN registration and provincial emergency nurses association membership are included with your application: Attached?: ❑ Yes ❑ No

NENA Bursary application form "B"

I acknowledge that _____ (name of applicant) is currently employed in an emergency care setting. This applicant should receive monies for _____ (name of course).

Reason: _____

Other comments: _____

_____

Signed: _____ Position:_____

Address: _____

NENA Bursary application provincial director's recommendation form "C"

Name of bursary applicant: _____ Province: _____

Length of membership with provincial emergency nurses group: _____

Association activities: _____

_____

Do you recommend that this applicant receive a bursary? ❑ Yes ❑ No

Reason: _____

Provincial director signature: _____ Date: _____

NENA Award of Excellence application form

Forward all submissions to the provincial representatives by April 20 of each year. Incomplete or late applications will not be eligible for consideration. Successful candidates will be presented with awards at the annual general meeting. In order to facilitate the process of the applications, the nominator will involve the nominee in the submission and verification of information.

Award of Excellence in: _____

Nominee: _____ Address: _____

_____ Postal Code: _____

Phone: work (_____) _____ - _____; home (_____) _____ - _____; fax (_____) _____ - _____

E-mail: _____

Employer: _____ Current position: _____

Nominator: _____ Address: _____

_____ Postal code: _____

Phone: work (_____) _____ - _____; home (_____) _____ - _____; fax (_____) _____ - _____

Letter of support (1) from: _____

Letter of support (2) from: _____

Signature of nominee: _____

Signature of nominator: _____ Date: _____

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