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B.C.'s pharmacy information source

ReadLinks

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Smoking cessation global challenge

Malaysian pharmacist shares his profession's success

Visiting Malaysian pharmacist Dr. Mohamad Haniki Nik Mohamed spoke at a VIHA session on smoking cessation.

Teamwork works: on the recommendation of a B.C. Lung Association representative, Vancouver Island hospital pharmacist David Forbes asked a visiting Malaysian pharmacy professor to talk with hospital and community pharmacists about a smoking cessation program he started in Malaysia.

Dr. Mohamad Haniki Nik Mohamed (or Haniki, as he likes to be called) shared his experiences as the founder of a smoking cessation program led by health professionals, which was launched in Malaysia in 2004.

The time was right to address smoking: twenty per cent of Malaysia's 25 million people smoke and in 2004, 43 per cent of adult males were regular tobacco users (that number is now 36 per cent). Prior to the program, "pharmacists weren't equipped to deal with smoking cessation" Dr. Mohamed told *ReadLinks*. But they became active program participants. The program consists of two-to-four weeks of self study, and a one-day workshop covering epidemiological and behavioural aspects of tobacco use, OTC and prescription tobacco-cessation drugs, and role playing.

In addition to the workshops, which are sponsored by a drug manufacturer, pharmacists must counsel patients at one of Malaysia's two hundred government-run stop-smoking clinics to receive program certification. Pharmacists also provide smoking cessation information sessions in workplaces.

Between 2004 and 2006, 30 per cent of Malaysian community pharmacists were trained in smoking cessation counseling. In keeping with the spirit of a total health-care approach, dentists and nurses are now training to help their patients.

Dr. Mohamed has been in contact with the Canadian Pharmacists Association to discuss its recently launched online smoking cessation counseling training for pharmacists. He would like to try a similar web-based version at home, now that the program has become established.

The man who passed Dr. Mohamed's name along as a potential speaker would like pharmacists to be more aware of a B.C. Lung Association program that can help their patients. Jack Boomer, director of the B.C. Lung Association's QuitNow services, attended the Food for Thought presentation, and said, "Most pharmacists in the audience hadn't heard of the QuitNow program." To help change that, information on QuitNow appears below.

CLICK OR CALL
quitnow.ca
1-877-455-2233

Quitnow offers stop-smoking options

Smoking cessation online, by phone

As the above article notes, some pharmacists aren't aware of two tools that can help patients stop smoking. Quitnow.ca and QuitNow by phone are endorsed by the B.C. Ministry of Health and the B.C. Lung Association.

Both services are based on QuitNet, one of the world's most visited health-care websites, and a smoking cessation provider to many organizations, including IBM. Quitnow.ca is a free-of-charge service available to every British Columbian. Here are just some of the features Quitnow.ca offers:

- Expert counseling.
- One-on-one peer support.
- Quit-smoking guides and calendars.
- Strategies and tools to stop smoking.

QuitNow by phone is also free, and includes:

- Registered nurses trained in smoking cessation.
- Service in over 130 languages.
- TTY service for hearing-impaired/deaf patients.

These online and telephone services may be just the help your patients need to stop smoking.

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*Read*Links

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Your questions and comments about this newsletter are welcome and may be forwarded to the registrar.

The *ReadLinks* newsletter provides important college and pharmacy practice information. All pharmacists are expected to be aware of these matters.

Printed on Recycled Paper

from the Registrar

What is pharmacist prescribing?

Marshall Moleschi

We've all heard that Alberta pharmacists can prescribe, and pharmacist prescribing was a topic at this year's BC Pharmacy Conference. But what can pharmacists in Alberta actually do when they "prescribe" and where are B.C. pharmacists in relation to this?

There are three aspects to Alberta's pharmacist prescribing initiative: prescribing in an emergency, adapting a prescription, and initiating a prescription. After completing an orientation program, Alberta pharmacists can provide the first two services. Initiating a prescription will require additional training; guidelines for this are being developed.

So, how do we compare in British Columbia? The CPBC likes to use the term "medication management" to describe the practices mentioned above, and B.C. pharmacists have been involved in two types of medication management for some time now: prescribing in an emergency and adapting a prescription.

The authority for pharmacists to prescribe in an emergency is described in CPBC Professional Practice Policy 31, which allows pharmacists to exercise professional judgment to provide patients with emergency prescription supplies.

This policy is used every day to ensure continuity of care; it was particularly useful on 9/11, when airline passengers diverted to B.C. needed emergency medications.

Additionally, Section 31 of the college's governing legislation allows a registrant to "dispense a drug or device contrary to the terms of a prescription…if it is within the specifications established under a therapeutic interchange program or protocol approved by the governing body of a hospital or by the council."

For a number of years, hospital pharmacists have worked within protocols allowing them to alter dosages, formulations, or regimens, substitute a drug expected to have a similar therapeutic effect, or renew a prescription.

Community pharmacy is using this too. For example, several years ago council approved a pilot program that allowed pharmacists in a large community pharmacy chain to do anticoagulant therapy monitoring and dosage adjustment.

To become fully equivalent to Alberta's standard for "adapting a prescription" B.C. would need to develop a framework similar to Alberta's, with elements such as a relationship with the patient, permission from the patient, restrictions on altering the prescription, documentation, and communication with the original prescriber. We hope to have this framework ready for September's council meeting.

As noted, the Alberta College of Pharmacists is developing guidelines for pharmacist-initiated prescriptions. Initial prescribing is not currently allowed in B.C. An opportunity to pursue this may arise once the Health Professions Act is proclaimed (about a year from now). We are working closely with Alberta to ensure that pharmacy practice remains comparable in both provinces.

These are exciting times for pharmacists; while Alberta's new pharmacy legislation has raised expectations for our profession, in B.C. pharmacists have been providing similar services to patients for some time, and new opportunities await.

COLLEGE MISSION: To ensure British Columbia pharmacists provide safe and effective pharmacy care to help people achieve better health.

Allergy information on PharmaNet

Know the capabilities of your local pharmacy software

Whenever a prescription is filled or refilled, it is important to check the patient's allergy status and monitor for potential interactions. Depending on the pharmacy software used, allergy information entered into the local pharmacy computer system is not automatically transferred to PharmaNet. As such, pharmacists cannot rely solely on PharmaNet to alert them to drug-allergy interactions.

Some local pharmacy software systems require a separate step by the pharmacist to ensure that allergy information entered into the local system is sent through to PharmaNet. Other systems automatically send the allergy information through.

However, with some versions, the allergy information is automatically put onto the clinical conditions field rather than the adverse reaction field. Because background checks are only done against the adverse reaction field, an amoxil prescription that is entered for a known penicillin allergy patient will not trigger an alert from PharmaNet if the allergy information is in the clinical conditions field.

Remember to always view the adverse reaction field and the clinical conditions field each time a prescription is filled to check if the allergy information only appears in the clinical conditions field. If this is so, re-enter it in the adverse reaction field. If you are unsure how to do this, contact your software vendor.

The next version of PharmaNet, which is currently under development, will address this issue.

For now, pharmacists need to be aware that additional "manual" monitoring for potential drug-allergy interactions may be required. Pharmacy managers are encouraged to contact their software vendor to ensure staff use the correct procedures for entering allergies and adverse reactions on PharmaNet.

Tech Talk

Pharmacy technician info

Preliminary work is underway for pharmacy technician registration and regulation. The first step includes sessions held across the province during September and October to provide information on pharmacy technician initiatives. The college would like to hear from you, so we hope you'll join us.

Mark your calendar

September 10	Vancouver
September 11	Nanaimo
September 27	Prince George
October 2	Victoria
October 4	Burnaby
October 10	Kelowna
October 11	Surrey
October 17	Kamloops
October 24	Vancouver
October 25	Cranbrook

Stay tuned

Pharmacy technician information session registration forms will be sent to pharmacy managers in July and posted on the college's website.

www.bcpharmacists.org

Email dateline: CPBC

Fifty per cent sign up!

Thank you to each CPBC registrant who submitted or updated an email address with the college over the past year. We can now communicate with 50 per cent of B.C.'s pharmacists by email, and that number is growing.

These pharmacists were the first to find out about:

- Plan B® emergency contraception schedule changes.
- Council election results and college governance.
- Flood preparation information.

Staying connected to the latest college information is easy. To update your email address, log on to the college website, click on the eServices logo, and follow the prompts.

Can't remember your eServices ID? It is printed on all personally-addressed CPBC documents, including annual registration renewal cards.

Update your email and you will be entered into a draw for one of two $100 prizes. The latest CPBC registrants to win are Bradley Ho and Kerstin Swinburnson!

www.bcpharmacists.org

AWARDS, GRANT, BURSARIES

Established and future pharmacists recognized

Awards

In celebration of its centennial year, the Canadian Pharmacists Association recognized 100 people who have contributed to the CPhA and the profession. Eleven British Columbians received this special acknowledgement in June at the CPhA annual conference in Ottawa.

- Frank Archer
- Dale Dodge
- Benjamin Gant
- David Hill
- Kay Jancowski
- Linda Lytle
- Whitney Matthews
- Findlay Morrison
- Robert Nakagawa
- Bernard Riedel
- Trevor Watson

Grant

Michelle Co, a Fraser Health Authority pharmacist who works at Ridge Meadows Hospital has received a $5,000 grant from FHA. It funds a project titled *Impact of Serum Albumin on Phenytoin Level: Scope of the Problem at a Canadian Community Hospital*. Co will be joined by co-investigators Dr. Anita Lo, Jason Gore, Dr. Edward Auersperg, and Dr. Elizabeth West.

The funding is part of the Fraser Health Seed Grant initiative that provides "novice researchers" with an opportunity to expand research skills.

Bursaries

Pharmacy's future in B.C. is looking as remarkable as its past and the present. The 2007 UBC pharmacy student recipients of the $1,000 B.C. Pharmacists Benevolent Society Bursary have been announced.

- Kirstin Degirolamo
- Pavan Dhillon
- Tim Dyer
- Joanna Stencel
- Jamie Yuen

The B.C. Pharmacy 1991 Centennial Bursary for $1,000 was awarded to Sean Spina.

PRACTICE NOTES

Dimenhydrinate is Schedule III

Pharmacist must be present for purchases

Dimenhydrinate is a Schedule III drug, and is only available in a pharmacy with a pharmacist present: a community pharmacist contacted the college about non-pharmacy sales of this drug. If you are aware of a similar situation, feel free to contact the college. We will let the retailer know which drugs they may and may not sell. We will also ask for the name of the dimenhydrinate supplier and inform them to stop distributing this Schedule III drug.

New controlled prescription pads

Additional security features added

PharmaCare has approved increased security features for controlled prescription pads. These new pads should be in circulation in July.

Detailed information regarding the security features will be mailed directly to pharmacies in the near future. In addition, the development of new pre-printed methadone pads is under way.

Medication return program

Public query prompts reminder

An email from a patient asking what the college is doing to promote the safe disposal of old or unneeded meds provides a timely reminder that pharmacies must take part in medication return programs. This is a mandatory requirement: Role 2, Function D of the CPBC's *Framework of Professional Practice* covers the disposal of drug preparations and products.

Make sure your pharmacy is doing its part – and remind the public of its role. Consider posting the following message: "Our pharmacy is environmentally conscious. Help us by returning unused drugs for proper disposal."

Medical comorbidity conference

Focus is psychiatric care

BC Mental Health & Addiction Services presents "The Tip of the Iceberg: Medical Comorbidity Across the Spectrum of Psychiatric Care" on September 28, 2007 in Vancouver. Presenters include Dr. Stephen Kisley, Denise Nelson, and Dr. David Gardner. To register, visit the following website.

www.bcmhas.ca/Education/RVHConferences.htm

How to prevent drug diversion and protect your pharmacy

Four key points to keep in mind

1. Scrutinize prescriptions

- Does it look "too good"? Is the writing too legible?
- Is it a photocopy?
  - Prescriptions from pads generally have some residual adhesive along one edge – photocopies do not.
  - Printed prescription blanks have sharply defined corners that are square – often photocopies are trimmed from larger sheets of paper.
  - Prescription pads generally are made from a different weight of paper than that used in photocopy machines.
  - With handwritten prescriptions, the ink from the preprinted information and the handwritten information are generally slightly different colours – in photocopies, they are the same colour.
  - With handwritten prescriptions, you can often see the indentations in the paper from the prescriber's writing – with photocopied prescriptions, there is no indentation and often the ink appears slightly raised.
- Was it written in more than one ink colour?
- Was it written entirely by the same hand?
- Do quantities, directions or dosage differ from usual medical usage or practice?
- Are the directions written in full with no abbreviations?
- Does it have acceptable standard abbreviations?
- Check the date. Has it been presented to you in a reasonable length of time since the prescriber wrote it?

- Does the prescription look as though it has been wet? (See description of "rinsing" below).

2. Types of fraudulent prescriptions

- Diverter steals prescription pads from doctors' offices and writes prescriptions for fictitious patients.
- Diverter alters a prescription to obtain larger quantities of drugs; for example, diverter changes the number of 10 to become 40, 70, or 100.
- Diverter changes telephone number on legitimate pads so an accomplice can "verify" the fraudulent prescription when you call.
- Diverter calls in prescription and gives his/her own telephone number for the call back confirmation.
- Diverter uses computer to create prescription pads for nonexistent doctors or to copy legitimate doctors' prescriptions.
- Diverter "rinses" the prescription blank with acetone (nail polish remover) to remove the original writing – replacing a non-controlled medication (e.g., an antibiotic) with a controlled medication.

3. Suspicious situations

- Prescriber writes unexpectedly large quantities.
- Diverter fills prescriptions for similar/same drug class from different doctors.
- Diverter presents prescriptions for multiple drugs with similar medical indications, such as CNS depressants and psychostimulants.
- Diverter presents prescriptions written in names of other people, e.g., "I'm picking up for my uncle."
- Out of town prescriptions – either physician and/or patient.
- A number of people, especially strangers, appear within a short time bearing similar prescriptions from the same physician.
- Prescriptions are presented after regular office hours, such as on weekends, to deter verification.
- Fraudulent prescriptions may be presented after a diverter has established a relationship in the pharmacy with legitimate prescriptions.

continued on page 5

Drug diversion

continued from page 4

- Diverter is in a hurry and unwilling to return later to pick up the prescription.
- Diverter wants pharmacy staff to rush to fill the order.
- Diverter refuses partial-fills.

4. Preventing diversion

- Encourage physicians to use tamper-resistant prescription pads; they can't be photocopied.
- Suggest to physicians that they write the quantity and strength of drugs on prescriptions in both numbers and letters.
- Discuss diversion problems with other pharmacists and physicians in your community.
- Know the prescriber, his/her signature, and the provincial medical college registration number.
- Know your patient and his/her medication history.
- Scrutinize the prescription as described above.
- Call the prescriber, using the telephone book or the phone directory (not the number on the prescription) for verification or clarification if there is a question concerning any aspect of the prescription.
- Request proper identification, such as a driver's license, when you are in doubt. Record information on the prescription if future reference is required.
- Keep the narcotic safe-locked if the dispensary area is left unattended. (One distraction tactic involves an individual asking the pharmacist for help while the accomplice enters the dispensary and steals narcotics when the pharmacist is distracted.)

If you believe that you have a forged, altered, or counterfeit prescription, do not dispense it.

- Use a delay technique. Make a positive statement such as, "Your prescription will be ready at 5 p.m." A negative statement such as, "Your prescription won't be ready until 5 p.m.," decreases the chance of the suspect's return.
- Do not physically restrain the suspect. If the suspect leaves the pharmacy, note the direction of travel and any vehicle description.
- Preserve the evidence. Always retain the prescription if possible. If the suspect demands the return of the prescription, mark it with your store stamp before returning it. Minimize handling of the prescription to preserve fingerprints. If possible, place the prescription in a paper or plastic bag.
- Call your local police department.

Reprinted from *How to Prevent Drug Diversion & Protect Your Pharmacy*, with the permission of Purdue Pharma.

OnCall PHARMACIST INFORMATION LINE — Questions and Answers

From inquiries to the OnCall Information Line, toll free 1-800-663-1940

Q A patient from Alberta moved into my community pharmacy's neighbourhood, and he would like me to dispense a prescription prescribed by an Albertan pharmacist. Can I do this?

A No – B.C. pharmacists cannot fill prescriptions initiated by pharmacists in Alberta because in B.C. they are not currently recognized as prescribers.

Q What is the status of DHEA, dihydroepiandrosterone, in Canada?

A Health Canada has recently declared DHEA a controlled prescription drug. This means it no longer requires special access. Since a DHEA product is not currently available in Canada, the drug must be prepared in compounding pharmacies. As with all controlled drug products, a prescription for DHEA cannot be transferred. Refills may be authorized on original written or verbal prescriptions and must indicate the number of refills and corresponding intervals.

Q Flomax® (tamsulosin) 0.4 mg is no longer available in Canada. I have a number of patients who still have active refills left on their original prescription. Can I automatically substitute Flomax CR® (tamsulosin) 0.4 mg?

A The manufacturer says Flomax CR® is not automatically interchangeable with Flomax® regular release because their pharmacokinetics aren't the same; even though they are both dosed once daily, the AUC and the T max are different. Physicians should be made aware that Flomax® regular release is no longer available. Use your professional judgment to dispense Flomax CR® when a previous Flomax® prescription allowed for refills. The key is to communicate with the physician and the patient. Fax or call the physician with information about what is being dispensed so he or she can approve the switch and monitor the patient. This process is equivalent to getting a new authorization for Flomax CR®.

Q I have just received a prescription for Champix™ (varenicline tartrate), the new selective nicotinic receptor agonist to help people quit smoking. The starter kit contains white 0.5 mg tablets and blue 1.0 mg tablets. The starter pack does not have its own DIN. How should I process the prescription on PharmaNet?

A Health Canada did not provide a unique DIN for the product, so the starter pack will have to be processed as two separate prescriptions, one for the 0.5 mg tablets and one for the 1.0 mg tablets.

Pharmacists should use their professional judgment when labeling the starter kit.

The labeling for the 0.5 mg Champix™ tablets could be: "On day 1-3 take one white tablet daily; day 4-7 take one white tablet twice daily."

The labeling for 1.0 mg Champix™ tablets could be: "On day 8 onward take one blue tablet twice daily."

Q A pharmacy rep for a generic manufacturer told me that her company's version of digoxin is interchangeable with brand-name versions. Is this true?

A Even though the generic manufacturers state their digoxin brands are interchangeable with brand-name products such as Lanoxin®, it is good pharmacy practice to ensure the patient is monitored for side effects, if he or she was previously stabilized on a brand-name product. In addition, it would be a courtesy to let the physician know that the patient wanted the generic, as it is fully covered. Self monitoring of the patient's heart rate and general well being is appropriate – patient education is key.

PHARMACY ELSEWHERE

Scotland

Pharmacy evolution has taken a large step here with the establishment of the Scottish Pharmacy Board. Previously, pharmacy concerns were represented by the Scottish executive of the Royal Pharmaceutical Society of Great Britain, which is the regulatory and professional body for the United Kingdom. The new board still comes under the RPSGB, but has greater autonomy to address issues it sees as important to Scots, including smoking cessation, sexual health, and substance misuse. Scotland and British Columbia have approximately the same number of pharmacists.

Arkansas

The most recent newsletter of the Arkansas Board of Pharmacy reminded pharmacists in that state to refrain from smoking while dispensing prescriptions, following reports of this activity. The state last year passed clean-air regulations that allow for fines of up to $1,000 a day for smoking in retail settings such as community pharmacies.

Missing narcotics

Take steps to ensure accountability

A recent incident in a pharmacy demonstrates the importance of maintaining accurate narcotic records and having a system that minimizes diversion risk.

The situation

A pharmacist found an unmarked bottle of narcotic tablets on a dispensary shelf. Upon further investigation it became apparent that narcotics were missing. A call to the wholesaler confirmed the company had received pharmacist-signed narcotic invoices, but corresponding invoices which should have been in the pharmacy could not be located. It is likely the scheme used was to send the signed narcotic invoices to the wholesaler, destroy those that should have been kept in the pharmacy, and then divert the narcotics upon delivery.

Contributing factors

- It was a busy pharmacy with a large staff.
- There was a high level of trust among staff members.
- Narcotic drug supplies were unpacked by numerous people.

Steps you can take

In the past, site visits by federal narcotic inspectors (which no longer occur) might have caught the diversion scheme. Now, pharmacy managers need to play an active role.

- Examine policies and procedures for ordering, receiving, and handling narcotics.
- Use a perpetual inventory system to track any drug supply changes.
- Hard count narcotic drug inventories every three to six months.
- If a narcotic drug inventory count is off, print local software system narcotic reports and match each entry against hardcopy prescriptions.

2007 Dean's Reception

Annual event recognizes B.C.'s newest pharmacists

Proud family members check the list of pharmacy graduate names.

CPBC Registrar Marshall Moleschi offers congratulations to the graduating class of 2007.

CPBC Registrar Marshall Moleschi chats with Dr. David Grierson.

CPBC council President Randy Konrad with BCPhA board member Derek Desrosiers.

whatwentwrong

REMOTE CPOE ERROR - a situation that's more than remotely possible

Problem

ISMP received a report from a hospital where a medical resident had prescribed a Norcuron® (vecuronium) infusion for the wrong patient via a computerized prescriber order entry (CPOE) system in a remote location. She meant to order the infusion for a ventilated patient in ICU but accidentally prescribed the drug for a patient on a medical unit. An inexperienced resident pharmacist processed the order and prepared the infusion, failing to recognize that a neuromuscular blocking agent should never be sent to a medical unit where patients are not intubated and on ventilators. The resident pharmacist affixed two labels to the bag: one noting that the infusion was a high-alert medication, and the other stating that the drug was a "paralyzing agent." The pharmacy technician who delivered the infusion did not think to question why the medication had been prescribed for a patient on the medical unit.

An independent double-check was required for this medication before administration, so two nurses verified the drug, pump settings, and patient. The infusion was started, after which the patient began walking to the bathroom. He fell to the floor once paralysis began to set in, but fortunately, he was able to call out for help. The resident physician was called, along with the rapid response team. When the team arrived and asked what happened, one of the nurses questioned whether the "new drug" she had just hung could be responsible. Realizing the problem, the physician immediately stopped the infusion. The patient was treated and suffered no long-term effects, although he was frightened by the experience, as were the involved staff.

The prescribing error escaped the attention of at least five staff members – the physician, pharmacist, pharmacy technician, and two nurses. The error was also able to get through the system despite safeguards such as warning labels and double-checks. It is also likely that the nurses working on the medical unit, where the drug had never been used, had little knowledge of Norcuron®, its indication, its paralytic effect, and the need for mechanical ventilation, despite the warning label.

Safe Practice Recommendations

When a prescribing error makes it all the way through the system and reaches a patient, it is clear that a single human error or knowledge deficit alone did not allow the error to occur. In this case, there were multiple causes of the error and, thus, multiple opportunities for improvement at each phase of the medication-use process.

Prescribing

The report above highlights an important point: when handwriting orders, prescribers often have the actual patient's chart in hand; thus, they are limited to writing orders for patients that reside on the unit where they are physically present. But when employing CPOE, prescribers can order treatments and medications from a remote location, multiplying the risk of entering orders into the wrong patient's record. However, safeguards are possible if CPOE technology is maximized. For example, the CPOE system may be able to match an order for a neuromuscular blocking agent with an active order for mechanical ventilation, and provide an alert if a match is not found. This option would only succeed if orders for mechanical ventilation and its discontinuance are consistently entered into the CPOE system. Another option is to set up the CPOE system to limit the prescribing of neuromuscular blocking agents to patients on units where mechanical ventilation is permissible. (Neuromuscular blocking agents used during rapid sequence intubation typically are not entered into the CPOE system before use; thus, this safeguard would not interfere with the use of a neuromuscular blocking agent during an emergency in any area of the facility.)

Dispensing

As with a CPOE system, the pharmacy computer system could be set up to limit the prescribing of neuromuscular blocking agents to patients on units where mechanical ventilation is permissible. Or, the pharmacy staff could be required to verify that the patient is being mechanically ventilated before entering/reviewing an order for a neuromuscular blocking agent, unless the patient is in a critical care unit or emergency department. If the neuromuscular blocking agent is dispensed from an automated dispensing cabinet, the drug should not be available via override unless it is part of a rapid sequence intubation kit. An independent double-check by another pharmacy staff member, which did not occur in the above-cited case, should also be mandated, even if a pharmacist has prepared the medication. (See below for further discussion about independent double-checks.)

The warning labels affixed to neuromuscular blocking agents are another area for improvement. Labels that state "paralyzing agent" alone may not be sufficient to make it clear that the patient requires mechanical ventilation. More informative, fluorescent red labels, which boldly state "Warning: Paralyzing Agent – Causes Respiratory Arrest" may help to communicate this important message more clearly to nurses (see photo in PDF version of the newsletter). (The American Society for Testing and Materials has designated this color for user-applied syringe labels of neuromuscular blocking agents used in anesthesiology; for more information on designing warning labels, see the website on page 8). A similar warning should appear in bold print on medication administration records (MARs).

Administration

It goes without saying that nurses should have requisite knowledge about the medications they are administering. However, research has confirmed that lack of information about the drug is the most common cause of medication errors. Thus, more needs to be done than to admonish nurses who make an error that could have been prevented by more knowledge of the drug. Making clear and concise drug information readily available to those who need it – at the click of a mouse with electronic MARs – is paramount, as is consistently instilling the message that safety trumps timeliness, to discourage rushing during drug administration.

Changes in how an independent double-check for high-alert medications is conducted are also in order. In the above-cited case, a second nurse double-checked the medication before it was administered. However, because a neuromuscular blocking agent reached an unventilated patient, many would conclude that the double-check process failed. But did it? We don't know the details of how the double-check was carried out in this case, but consider the following:

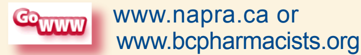
- *If the first nurse compared what pharmacy had dispensed with the physician's order, verified the patient using two identifiers, and correctly programmed the pump to deliver the infusion according to the physician's order; and*
- *If the second nurse compared the drug infusion to the physician's order, verified the patient using two identifiers, and confirmed that all the pump settings and the line attachment were correct according to the physician's order; then*
- *The independent double-check, itself, was carried out perfectly, despite the failure to detect the prescribing error.*

Most likely, the problem was not that the nurses did not carry out an independent double-check according to a typical process used in many hospitals – independently comparing the "five rights" against the

continued on page 8

DRUG UPDATES

For full details please check:



www.napra.ca or www.bcpharmacists.org

- Actos® (pioglitazone hydrochloride).
- Avandia®, Avandamet® and Avandaryl™.
- Avastin® (bevacizumab).
- Complete® All-In-One MoisturePlus™ contact lens solution.
- Depakene 500 mg and ratio-Valproic 500 mg.
- Fraxiparine® and Fraxiparine® Forte graduated syringes.
- OneTouch® Ultra® Test Strips.
- Ventolin® I.M. injection and Ventoline® I.V. infusion solution (salbutamol sulphate for injection).

CPOE error

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physician's orders or a verified MAR. In fact, the nurses followed the physician's orders perfectly. What is missing in the double-checking process is a cognitive review of the appropriateness of the drug, dose, and route of administration. Does the drug's indication match the patient's diagnoses or conditions? Is the dose appropriate for this patient? Is the route of administration proper?

These questions and more need to be answered independently by the initial clinician preparing selected high-alert medications for dispensing and administration, along with a second clinician double-checking the medication. Without a cognitive review of the prescribed high-alert medication during a double-checking process, prescribing errors – which are the source of more than a third of all medication errors – may not be detected and corrected before reaching the patient. For more recommendations on safeguarding neuromuscular blocking agents, please see the website below.

Reference: 1) Leape LL, Bates DW, Cullen DJ, et al. Systems analysis of adverse drug events. JAMA July 5, 1995; 274(1):35-43.

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Designing effective warning labels – www.ismp.org/Newsletters/acutecare/articles/20060824.asp

Safeguarding neuromuscular blocking agents – www.ismp.org/Newsletters/acutecare/articles/20050922.asp

Safer Healthcare Now! initiative

Medication reconciliation tools available

Safer Healthcare Now! is a national campaign designed to promote and support improved patient safety outcomes. It offers a number of tools to Canadian health-care providers to help them track care-related information, thereby contributing to best practices in patient care.

Of particular interest to pharmacists and their patients is the Med Rec program, with its "Best Possible Medication History" (BPMH) approach. The following Safer Healthcare Now! websites offer a number of medication reconciliation tools for pharmacists to integrate into patient-care plans:

- Getting Started kit.
- Overview information.
- Measurement worksheets.
- Individual BPMH record and audit tool.
- Individual transfer BPMH record and audit tool.

www.saferhealthcarenow.ca/Default.aspx

www.saferhealthcarenow.ca/Default.aspx?folderId=82&contentId=124

Domperidone and breast feeding

Summary info of interest to pharmacists

The Fraser Health Authority's breastfeeding practice council has released a one-page information sheet on domperidone in lactation and kindly passed along a link to this topic of interest to pharmacists.

www.fraserhealth.ca/HealthInfo/PublicHealth/MedicalHealthOfficerUpdates

UBC Career Avenues Night

Professional practice ideas!

UBC's pharmacy alumni will hold its annual Career Avenues in Pharmacy event on Monday, October 1 at the UBC Life Sciences Centre from 6-9 p.m.

This year's theme, "The Tradition and Beyond" highlights the range of careers available to pharmacy students today.

Career Avenues is an informative and educational event that provides UBC pharmacy students with an opportunity to learn more about the many career choices available to them after graduation and ideas on how to focus their education accordingly.

For more information, including updates and how to participate, visit the website below and click on Career Avenues or contact John Shaske at Howe Sound Pharmacy at 604-886-3365.

www.soundcare.ca

NEW PDAP TEAM MEMBER

Long-time CPBC participant fills role

A pharmacist with an impressive track record for participating on CPBC committees has joined the college's professional development and assessment program. Judy MacDonald, who also has an extensive community pharmacy career, is the college's new assessment programs administrator.

The college extends a warm welcome to Judy, who previously served on the college's community pharmacy practice committee, MentorLink program, and participated as a PDAP LPP assessor and peer practice reviewer.