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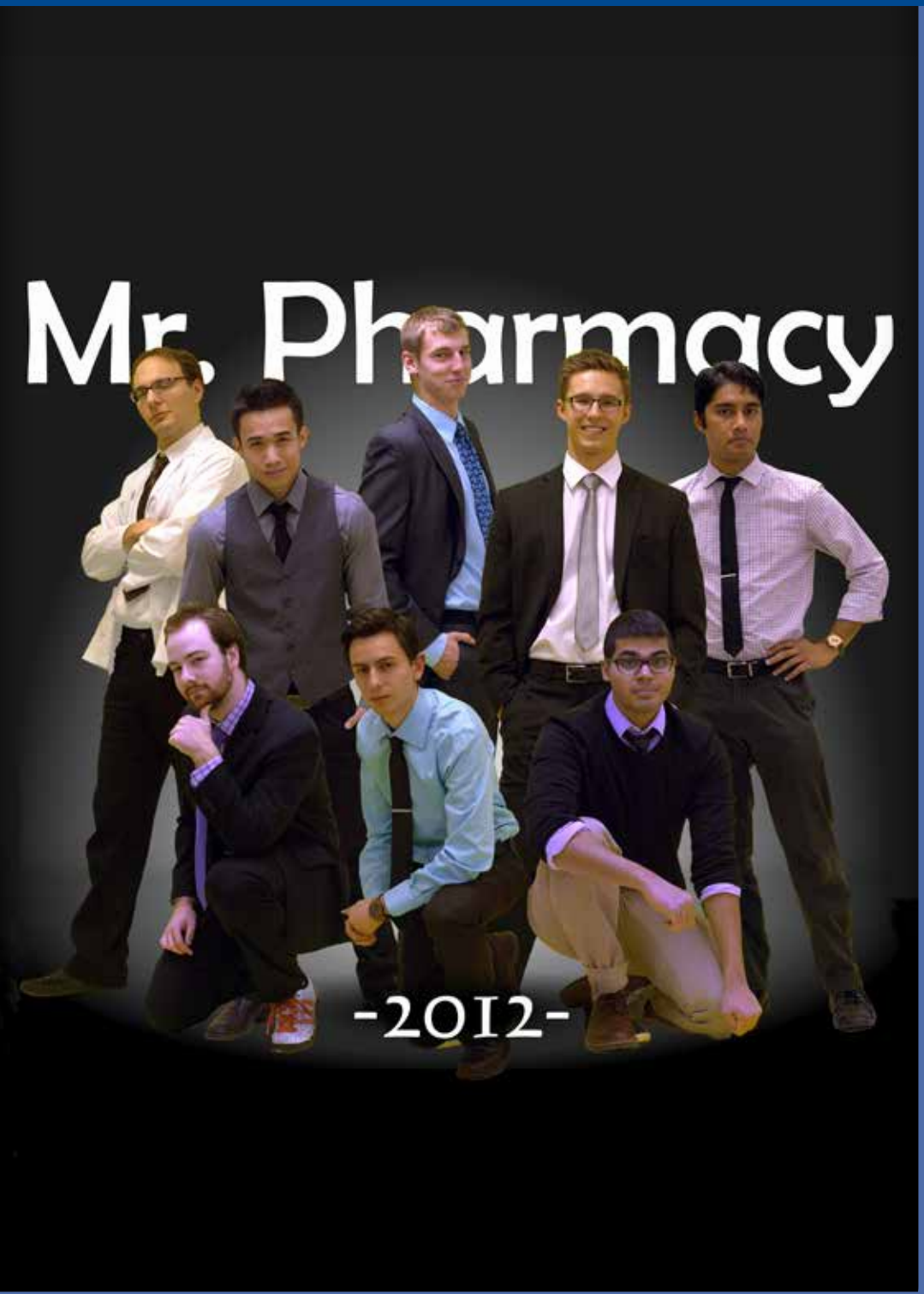
COMMUNICATION

The Voice of Pharmacists in Manitoba



Continuing Education

Therapeutic Options Focus on Rheumatoid Arthritis

The Last Word

Take This and Call Me in the Morning

Feature

Pharmacist to the Rescue

Publication Mail
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THIS ISSUE

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90 Garry Street, Suite 202, Winnipeg, MB R3C 4H1

Telephone: (204) 956-6680 or 1-800-677-7170

info@msp.mb.ca www.msp.mb.ca

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Cover *– Faculty of Pharmacy, Mr. Pharmacy 2012–2013 Contestants*
Top row left to right: Denys Borovytskyy, Jeff Ngo, Riley MacCharles, Alexie Berdnikov, Ryan Persaud
Bottom row left to right: Cody Hotel, Eddie Ahoff, Shawn Chohan
Full story included on Page 4

Become a Member of the MSP Board of Directors

I was having some writers block when it came to ideas for this editorial so I thought it would be an appropriate time to discuss the upcoming opportunities to serve your profession and volunteer to run for the Board of Directors of MSP. A new board will be elected in April and there has never been a better or more exciting time to get involved.

Much is happening in the world of pharmacy and that is especially true for Manitoba. The new board will see the passage of our new regulations that will govern our expanded scope of practice. It will be up to the directors and staff of MSP to negotiate with government for paid services and shape the future of our profession. There has never been a more important time in our professional lives. The switch from product based to service based reimbursement has already begun. We just need to ensure that we are not left out and are recognized for the benefits we bring to the health care of Manitobans. This will only happen if we get people involved.

ALAN LAWLESS
Chair, Communication

It is a lot of work being on the board of directors but it is rewarding being directly involved with the profession. 2013 will mark the 40th anniversary of MSP. That is 40 years of looking out for the economic and professional interests of pharmacists in Manitoba. I only see MSP getting stronger and being a bigger force in the health care arena. We have great staff and the future is very bright with the leadership we have in place.

So when the call for nominations arrives don't be afraid to step forward and run to be part of the new board. The next two to five years will be the most important window of time that the profession will see in regards to shaping our future.

Update from the Mantra Smoking Cessation Strategy Working Group

In February of 2010, the MSP began working with Mantra (*Manitoba Tobacco Reduction Alliance*) and a number of other stakeholders to develop a smoking cessation strategy document for Manitoba. The final proposal is titled "*Recommendations for a Comprehensive Smoking Cessation Framework*."

GAYLE ROMANETZ
Vice President, MSP;
Committee member,
Mantra Smoking
Cessation Strategy
Working Group

We are very pleased to see that the leadership and perseverance of Mantra combined with the hard work of the volunteers has culminated in completion of this document. This report highlights important facts about Manitoba's current situation, the economic impacts of smoking, and strategies that could be used to reduce tobacco use. It is our hope that someday it will be considered for inclusion in a broader provincial tobacco plan.

The Manitoba Society of Pharmacists remains committed to reducing tobacco consumption and encourages all members to motivate and support attempts to quit. Why don't you **QUIT** or **CATALYZE** and join the growing number of pharmacists nationally who have taken advanced training to help their patients on this journey. It's not easy yet quitting is one of the best things our patients can do improve their health and quality of life.

Please contact MSP for more information about these training programs.

Q.U.I.T.
QUIT USING & INHALING TOBACCO

CATALYST

Mr. Pharmacy Pageant

As young professionals, the students of the Faculty of Pharmacy are always striving to find ways to combine having fun while supporting a good cause. In the past, students have raised money for MS Research and the Juvenile Diabetes Research Foundation, and most recently were the top fundraisers for the CIBC Run for the Cure. Therefore when CAPSI representatives Ashley Ewasiuk and Jaclyn Deonairne, along with the Student Association Social Coordinator Nicole Lee presented the idea of the first Mr. Pharmacy Pageant everyone was willing to participate. The evening would not only be a chance to connect with classmates, but also an opportunity to raise money for Prostate Cancer Research and Movember.

Mr. Pharmacy Pageants have been taking place at other pharmacy faculties across the country and these girls believed it was time to find the man in our Faculty who epitomizes the profession of pharmacy. Mr. Pharmacy is someone who is calm, cool and collected. He is both respected and respectful as well as leads by example in the classroom, workplace and community. Each class was asked to nominate two students whom they believed exemplified the qualities and characteristics of Mr. Pharmacy. The contestants included Alexei Berdnikov, Riley MacCharles (1st year), Ryan Rohan Persaud, Shawn Chohan (2nd year), Jeff Ngo, Eddie Ahoff (3rd year), Cody Hotel and Denys Borovytskyy (4th year). The contestants would be competing in various events throughout the night to win the title of Mr. Pharmacy. The contestants worked hard to live up to the prestigious title of Mr. Pharmacy and though there could only be one winner, all the contestants represented their classes with sophistication and professionalism.

ALIA MARCINKOW
MSP Student Liaison

The night began with a delicious dinner at Canad Inns Polo Park where students, Faculty, and members of both MPhA and MSP mingled and shared in the beginning of the holiday season. As dessert was served the main event began with the introduction of the judges, Dr. Vercaigne, Mrs. Kleiman, Ms. Ng and Dr. Cote. The contestants set the mood by starting the pageant with a choreographed dance. Their energy and excitement percolated throughout the crowd.

4th Year Co-Stick Scott Andresen presents Jeff Ngo with the Mr. Pharmacy plaque.

Next was the professional dress section where the boys showed that Mr. Pharmacy is not only a respected professional but also an impeccable dresser. Outfits ranged from fitted suits, crisp lab coats and even a vest with a strategically placed picture of Mrs. Kleiman, one of the judges. The pageant continued with the contestants competing in a pill counting competition, where the quickest and most accurate counter received top marks.

Though dispensing and counting are both part of Mr. Pharmacy's job, he also has to have sound professional judgment. Mr. Ron Guse, the winner of the best mustache, presented the contestants with ethical questions. Each contestant spoke from the heart and often put their patients before themselves in their answers and in their practices.

The night finished with each contestant showcasing his talents outside of the practice of pharmacy. They dazzled the crowd with juggling, singing, dancing, public speaking, work out instruction and even how to make ice cream using dry ice. Their talents proved to be the highlight of the show and were met with energetic applause. At the end of the evening the first Mr. Pharmacy was crowned, and the

Left to right: Riley MacCharles, Alexei Berdnikov, Cody Hotel, Shawn Chohan

Left to right: Denys Borovytskyy, Riley MacCharles, Shawn Chohan and Jeff Ngo

winner was Jeffery Ngo. All the contestants showed that Mr. Pharmacy is a professional who excels in all aspects of life. Their hard work and commitment to the evening proved that they all were the best contestants for the first annual Mr. Pharmacy Pageant and we are all proud of them. The night continued with a dance and lots of pictures with the new found celebrities of the Faculty.

Overall the evening was a huge success raising $3,000 for the Movember Foundation and beginning a tradition that the students hope is carried on for years to come.

Interview with Mr. Pharmacy, Jeff Ngo

MSP Student Liaison, Alia Marcinkow had an opportunity to pose some questions to the Mr. Pharmacy pageant winner Jeff Ngo after he was crowned.

Alia –"How does it feel to be the first Mr. Pharmacy?"

Mr. Pharmacy – "It feels absolutely great! I could not believe that I had won when they had announced the winner. After I was awarded the sash and plaque I really felt like I had won a Miss Universe competition, except Mr. Pharmacy edition. It is an absolute honour to be the first Mr. Pharmacy and it'll definitely be something that will always be one of the highlights of my life."

Alia – "Did you enjoy the pageant?"

Mr. Pharmacy – "The pageant was very well thought out and the girls organizing the event did a fantastic job with every aspect of the night. Considering that it was the very first Mr. Pharmacy event and that they had nothing to go off of in the past, the night went so smoothly that it seemed like they had been organizing this event their entire lives. Everything was very professional yet fun at the same time and it really set the standard on how to run future Mr. Pharmacy events. I especially enjoyed the talent portion as all the contestants brought their own unique talent to the event. It made for a very diverse and exciting night. My one regret is that I was not able to try some of the ice cream that was made on the spot by one of the contestants during their talent portion."

Alia – "Would you recommend that it become an annual event?"

Mr. Pharmacy – "I believe that there are not very many opportunities where the staff and students are able to get together outside of the classroom. This event was a great chance for that to happen and it did so very successfully. The participation of the professors and the Registrar in the competition made things very compelling and was a great touch. I would 100% recommend that it become an annual event as it brings students, staff, and members in the field of pharmacy together for a night of entertainment. With everyone's support I know the event will continually become bigger and even more successful."

Alia – "Would you encourage students to participate in future pageants?"

Mr. Pharmacy – "Definitely! I had an amazing time leading up to and during the event. The energy during the performances is incomparable and can only be experienced by participating in the event. There was never a feeling that you were alone in the competition either, as the camaraderie with the other contestants made for a great support system throughout the night. It's also quite nice that you get a lot of extra smiles when walking around campus. I very highly suggest anyone to jump at the chance to participate as a contestant in the Mr. Pharmacy competition as it will definitely be something they will never regret."

Based on the success of the first Mr. Pharmacy Pageant, it certainly appears that there will be many more to come!

The Sounding Board is here for members to speak up and speak out on issues that are of interest to pharmacy. The Sounding Board is not intended to be an expression of the opinions of the Manitoba Society of Pharmacists, but rather is meant to be a forum for opinions and thoughts. We encourage you, our members, to write in with your opinions on the topical issues of the day.

The letter below was written in response to a request by the Health Care Innovation Working Group of the Council of the Federation regarding generic tendering on a Pan-Canadian level.

manitoba society of Pharmacists

Nov. 6, 2012

Ms. Tammy Eberle
Policy and Program Coordinator, Pharmaceutical Services
Ministry of Health
Government of Saskatchewan
3rd Floor, 3475 Albert St.
Regina, Saskatchewan S4S 6X6

Email: teberle@health.gov.sk.ca

Dear Ms. Eberle,

The Manitoba Society of Pharmacists is a non-profit advocacy organization representing 800 pharmacists in the province. The purpose of this letter is to provide a response to the Pan-Canadian approach to obtain better value for generic drugs through the Health Care Innovation Working Group of the Council of the Federation as requested.

Purchasing plans of this nature have been considered by governments in the past and a number of concerns have been identified including:

- potential for drug shortages caused by single source listings
- decreased manufacturing due to lack of competition in the market place, and
- impacts on distribution and inventory management issues.

Supply of medications and drug shortages significantly impact patient care and patient safety. Lack of consultation from community and hospital pharmacy sectors is a serious concern for Manitoba. This is a critical issue that requires the Health Care Innovation Working Group to establish real time involvement of pharmacists at the provincial level. It is crucial to consult with pharmacists to ensure an adequate understanding of the diversity of the supply chain and the issue of safety and quality of drugs are addressed.

Any purchasing plan adopted by provincial and territorial governments needs to make sure at least 2 to 3 suppliers remain in the market so the risks of a single source of supply are reduced. An example of a single source supplier not being able to deliver product occurred earlier this year when the Sandoz plant in Boucherville, Quebec had to scale back production of various hospital drugs for which it was the sole Canadian producer resulting in serious consequences including the cancellation of surgeries.

What is less known is that drug shortages are an everyday occurrence at the community pharmacy level. Pharmacists increasingly spend more time managing drug shortages and ensuring the supply chain remains open by alternating suppliers and in some situations switching drugs within similar categories. This not only causes additional pressure at the pharmacy level, patient care is compromised due to medication delays and additional physician visits. The time spent by pharmacists managing supply issues would be better spent providing patient care.

While drug prices are important, true value is realized through appropriate use of drugs, and some of the savings from purchasing changes need to be re-invested in new professional pharmacy services that have been shown to lead to better patient outcomes. The Canadian Pharmacists Association has identified that every $1 invested in new pharmacy services could result in $4 saved in the health care system.

Pharmacy practice across Canada is evolving from product to patient focus. A continued focus on generic drug pricing in isolation of patient safety and patient care will reduce opportunities to improve health outcomes. Pharmacists are the most accessible healthcare provider and are medication experts. Their role in disease prevention, management and primary care is underutilized. In addition to involving pharmacists in any discussions regarding drug supply there needs to be adequate recognition and compensation for pharmacists to expand opportunities to improve healthcare outcomes for patients.

Pharmacists play an active role in helping manage drug costs. There is much more that we can do to help build sustainable, innovative and evidence-based service provider funding methods to contain the rise in healthcare costs. We recommend that pharmacists be included in all discussions related to this initiative at both the Pan-Canadian and the provincial level. We welcome the opportunity to discuss the content of this letter in greater detail and would be happy to partner with you to address the immediate issues of drug supply and inventory management.

Yours sincerely,

Mr. Mel Baxter
President

Dr. Brenna Shearer, PhD
Executive Director

cc: Honourable Greg Selinger, Premier of Manitoba
Honourable Theresa Oswald, Minister of Health, Manitoba
Mr. Milton Sussman, Deputy Minister of Health, Manitoba
Ms. Bernadette Preun, Assistant Deputy Minister of Health, Manitoba
Mr. Perry Martin, Senior Advisor to the Deputy Minister, Saskatchewan Health

90 Garry Street, Suite 202, Winnipeg, MB R3C 4Hl
Telephone (204) 956-6680 Toll Free 1-800-677-7170 FAX (204) 956-6686 email: info@msp.mb.ca
www.msp.mb.ca

MSP and St. John Ambulance – New Membership Benefit

St. John Ambulance (SJA) and the Manitoba Society of Pharmacists are providing an opportunity for training in Emergency First Aid with Level C CPR to members within MSP.

The course takes eight hours to complete, with a one hour break for lunch and two fifteen minute breaks. The discounted rate will be $65.00 per person (taxes included). The course certifies you as a First Aider 1 in Manitoba for three years and is the program which meets the requirements for the Manitoba Pharmaceutical Association Administration of Injections Practical Skills Workshop. To access the MSP customer number please visit the Preferred Provider Program tab under Pharmacists Membership on the Manitoba Society of Pharmacists website at www.msp.mb.ca.

About the Course

In addition to a certified St. John Ambulance Instructor, the materials and equipment used to deliver the training are included and consist of: videos, manikins, defibrillators, tests, and bandages. Each student will receive a current edition of the "*First on the Scene Student Reference Guide*". All students who complete the First Aid and CPR training will receive a professionally printed certificate, will be entered into the SJA database and are covered by a blanket $100,000 liability policy.

All Instructors are certified and monitored every 3 years as approved by the Province of Manitoba. All courses offered by St. John meet or exceed minimum standards also as set out by the Province of Manitoba. St. John Ambulance carries $10 million general liability/errors and omissions insurance coverage. All St. John Ambulance Instructors are also covered by a similar policy with $10 million liability insurance.

How to Access Courses

St. John Ambulance offers the Emergency First Aid course to the public seven days a week out of their Winnipeg training center (from 8:30 - 4:30pm at 1 St. John Ambulance Way). To register in one of these public courses please go to https://sites.google.com/site/sjawinnipeg/ and use your customer number. If you would like to set up a corporate group course for a minimum of ten people, please select the *'Corporate Group Course*' and your customer number will be required. The corporate group courses can be used for any private course throughout Manitoba.

For members from the Westman area, St. John Ambulance offers weekly public Emergency First Aid courses out of the Brandon office. This office is located on the 2nd floor of the Shoppers Mall in the Business Center. For the course calendar please visit http://www.sja.ca/Manitoba/Training/Pages/CourseCalendar.aspx and scroll down to the Brandon location. Registrations can be done by phone: 204-727-4466 or fax: 204-727-1623. Please ensure to put all registration under your customer number.

About St. John Ambulance

In addition to being The Experts in First Aid, CPR and AED training; St. John Ambulance is a charitable training organization. When you purchase equipment or take a course through St. John Ambulance, you're not only taking a step forward in saving lives, but your funds are reinvested right back into Manitoba. All proceeds from their training programs and products go to support community service and volunteer programs. These programs help improve the quality of life throughout Manitoba, and include youth leadership, public first aid duty and Therapy Dog Programs for children with autism or reading difficulties and for senior citizens. In 2010 SJA provided over 30,000 volunteer hours in communities across Manitoba!

When using St. John for First Aid, CPR and AED training, you receive the highest quality of training in Canada, and all proceeds go to support charity and community services. For more information about St. John Ambulance please check out http://www.sja.ca/Manitoba.

St. John Ambulance
SAVING LIVES
at work, home and play

One St. John Ambulance Way
Winnipeg, MB R3G 3H5
Tel: 204-784-7007 Fax: 786-2295
Cell: 204-333-2728
Richard.fetherston@mb.sja.ca

2012 Emergency First Aid with Level "C" CPR Course Outline

Also known as First Aider I

Prerequisite for the Manitoba Pharmaceutical Association Administration of Injections Practical Skills Workshop.
(8 hour course with 6.5 hours of contact time)

Requirements Suggested Time*		Time allocated
8:30 – 10:00	Casualty Management – Roles & Responsibilities – Emergency Scene Management - unresponsive – Emergency Scene Management - responsive – Shock – Fainting	90 minutes
10:00 – 10:15	**Break**	
10:15 – 11:15	Choking - all ages	60 minutes
11:15 – 12:00	Cardio (Level C)	105 minutes
12:00 – 13:00	**LUNCH**	
13:00 – 13:45	Cardio, AED and CPR	
13:45 – 14:00	Infant CPR	
14:00 – 14:15	Burns	15 minutes
14:15 – 14:30	**Break**	
14:30 – 15:30	Severe Bleeding	60 minutes
15:30 – 16:00	Medical Conditions	30 minutes
16:00 – 16:30	Exam	

*While suggested timelines are included in this course outline, Instructors may deliver the course in whatever order they feel is appropriate for their classes.

Emulsions

Emulsions are two-phase systems in which one liquid is dispersed throughout another in the form of small droplets. The disperse phase is also called the *internal* phase. The dispersion medium is also called the *external* or *continuous* phase.

Emulsions that have an oily (oleaginous) internal phase and an aqueous external phase are called oil-in-water emulsions. Emulsions that have water as the internal phase and an oily external phase are called water-in-oil emulsions.

MEERA B. THADANI
M.Sc.(Pharm.)

To prepare a stable emulsion, an emulsifying agent is often used. These are surface-active (surfactant) agents that decrease the surface tension between the two immiscible phases by forming a barrier around the droplets. Some emulsifying agents can also increase the viscosity of the emulsion.

Emulsions can be used topically, orally or parenterally. Semisolid emulsions are used topically. Emulsions are used to prepare a:

- relatively stable homogenous mixture of two immiscible liquids,
- palatable oil-in-water preparation of a foul tasting oil,
- more digestible, more easily absorbed preparation,
- more effective version of an otherwise obnoxious product. Emulsification helps to reduce the size of the oil globules and increase the surface area and therefore helps absorption, and
- topical formulation.

Emulsification

Emulsification describes the manner in which emulsions are produced and stabilized. There are three theories proposed:

1) Surface tension theory – All liquids have the inherent tendency to form a shape that exposes the smallest surface area. This can be measured quantitatively and is called the liquid's *surface tension.*

When two immiscible liquids are in contact with each other they resist breaking up into smaller droplets. This resistance is called *interfacial tension.* Substances that can lower this resistance are called *surface-active* (surfactants) or *wetting* agents. These agents reduce interfacial tension, that is, the attraction of the liquid for its own molecules. This permits the formation of smaller droplets (Figure 1) which then have a lesser tendency to coalesce (come together).

2) Oriented-wedge theory – This theory assumes that single (monomolecular) layers of emulsifying agent orient themselves around droplets that form the internal phase. Many of the surfactants used in emulsions are *amphiphilic.* That is, they contain a "solvent loving" and a "solvent hating" segment as part of their molecular structure. These amphiphilic molecules can position themselves so that the "solvent loving" part is towards the external phase and the "solvent hating" part is towards the internal phase. This allows droplets that form the internal phase to be surrounded by the surfactant promoting the formation of an emulsion (Figure 2).

3) The plastic or interfacial film theory – This theory suggests that the emulsifying agent forms a thin film around droplets in the internal phase preventing them from coalescing (Figure 3).

Properties of a pharmaceutically elegant emulsion include:

- a fine droplet size
- slow aggregation (coalescence) of the droplets to avoid "creaming"
- ease of redispersion when shaken

Creaming is the migration of the droplets of the internal phase to the top or bottom of the emulsion. If the internal phase is oil, it will migrate to the top because the

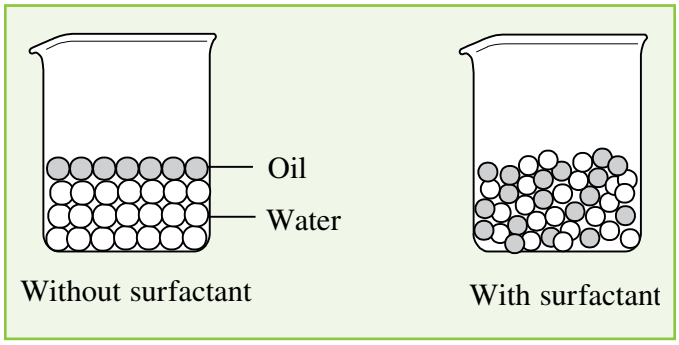

Figure 1 Emulsification using a surfactant.

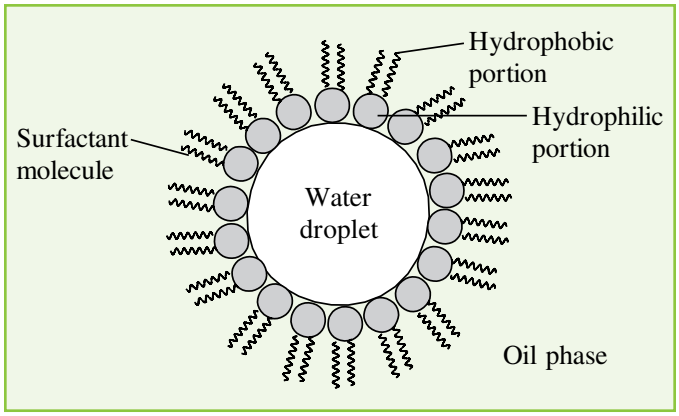

Figure 2 Oriented-wedge theory.

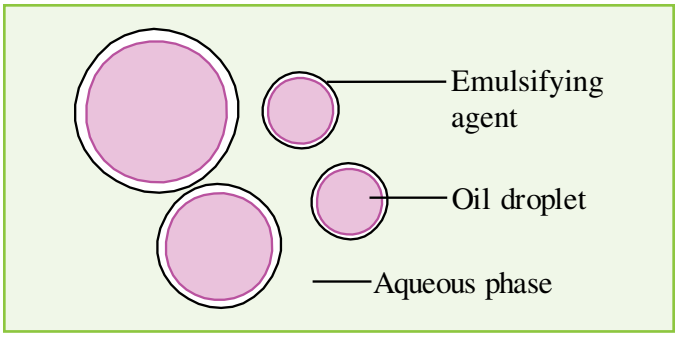

Figure 3 The plastic or interfacial film theory.

density of oil is less than that of water. If the internal phase is water, it will migrate to the bottom.

Coalescence is the merging of small droplets to larger droplets. When the phases eventually separate and cannot be re-dispersed the emulsion is said to be "cracked". This is because the barrier (formed by the surfactant) between the internal phase and the external phase no longer exists or is "broken".

Whether an emulsion is an oil-in-water (o/w) or water-in-oil (w/o) is determined by the:

- emulsifier
- relative amounts of water and oil
- order of mixing

The relative amounts of the internal and external phases are important to stability. As the concentration of the internal phase is increased, the viscosity of the emulsion increases. When it reaches a critical point the viscosity decreases dramatically and the emulsion undergoes *inversion*. It changes from being a water-in-oil to an oil-in-water, or vice versa, emulsion. Emulsions can be prepared without inversion with up to 75% of the volume of the formula in the internal phase.

Compounding emulsions

Acacia emulsions

Acacia is unique in that it will easily form an o/w emulsion using a Wedgwood mortar and pestle. This quality makes it a useful ingredient for extemporaneous compounding.

The emulsion process requires that a primary emulsion be first formed with a specific ratio of ingredients.

For vegetable or *fixed* oils this ratio is:

4 parts oil: 2 parts water: 1 part acacia (4:2:1)

For *volatile* oils this ratio is:

3 parts oil: 2 parts water: 1 part acacia (3:2:1)

or

2 parts oil: 2 parts water: 1 part acacia (2:2:1)

a) Dry gum method - This is the preferred method.

The calculated amounts of oil and acacia are placed in a *clean, dry* Wedgwood mortar and triturated to wet the acacia and form a smooth mixture. The amount of water required is measured in a *clean* graduated cylinder and added at once with *fast* and *hard* trituration until a crackling sound is heard. This signals the formation of the primary emulsion. Now the remainder of the ingredients can be added.

b) Wet gum method

Place the calculated amount of acacia in the Wedgwood mortar. Wet the acacia with glycerin or other water miscible wetting agent. Add the calculated amount of water *slowly* with trituration. Add the oil *slowly* with trituration until the primary emulsion is formed. Now the remainder of the ingredients can be added.

The order of addition for the other ingredients in the formula is to:

- Incorporate additional water-miscible liquids, syrups, or water-soluble drugs directly to the primary emulsion. It is preferable to dissolve solid ingredients in water or appropriate solvent before adding to the emulsion.
- Place any insoluble ingredients in a separate mortar and add the primary emulsion to the powder slowly with trituration to produce a smooth preparation. Then add the quantity sufficient (qs) to the specified volume with the vehicle.
- Oil-soluble ingredients may be dissolved in the oil first. This solution can be used in forming the primary emulsion.

Preservatives are required for acacia emulsions. Because it is a carbohydrate polymer it can serve as a medium for microbial and fungal growth. The following preservatives are often used in acacia emulsions:

- Benzoic acid 0.2% w/v
- Alcohol 4 to 6% v/v
- Methylparaben 0.2% w/v with propylparaben 0.02% w/v

Store oral preparations in the refrigerator. If all the ingredients are chemically stable an expiry date of 14 days in the refrigerator is considered acceptable for products to be used orally. External preparations can be stored at room temperature.

In situ (nascent) soap emulsions

Nascent means emerging or starting to form. In these emulsions the emulsifier is being formed as the emulsion is made. The emulsifier is calcium oleate (Figure 4) and it is formed when oleic acid combines with calcium hydroxide to form the emulsifier calcium oleate. Calcium oleate is insoluble in water and forms a w/o emulsion that is used *externally*.

Traditionally, olive oil was the agent used to form nascent emulsions because of its high content of free fatty acids. Its composition is oleic acid (65%) and about 15% each of palmitic and linoleic acids. Add 3 – 5 drops of oleic acid/30 mL olive oil to ensure that a sufficient quantity of

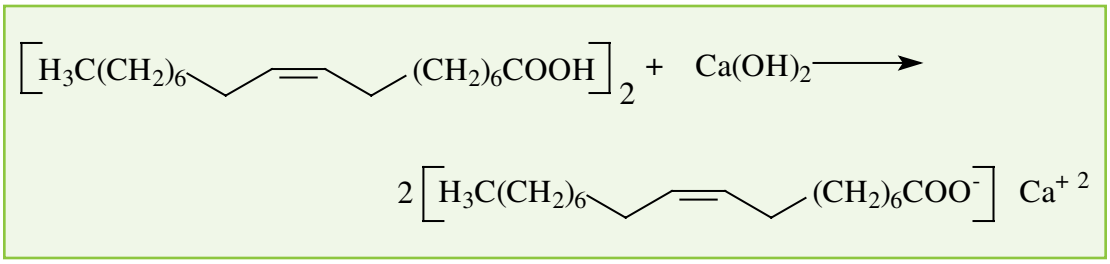

Figure 4 Formation of calcium oleate.

emulsifier will be made to form the emulsion. If any other vegetable oil is used in the formula, add 1 – 1.5 mL oleic acid/30 mL oil.

The formula for calcium hydroxide (Lime Water) solution is:

Calcium hydroxide	3 g
Purified water	1000 mL

Add calcium hydroxide (3 g) to purified water (1000 mL). Agitate the mixture repeatedly for one hour. Allow undissolved calcium hydroxide to settle. Dispense the clear supernatant solution for formulations.

a) Bottle method — Place equal amounts of oil, sufficient oleic acid and water in a bottle. Shake the bottle vigorously to form the emulsion. This can then be used as a wetting agent for soluble ingredients.

b) Mortar method — Place solids in a mortar. Add the oil in portions with trituration until a smooth product is obtained. Add the calcium hydroxide in portions with trituration to form the emulsion.

The order of addition for the other ingredients in the formula is:

- Add water-miscible and water soluble substances to the calcium hydroxide before it is added to the bottle or mortar. This is because water is the internal phase.
- Oil is the external phase. Oil soluble substances can be added to the oil before emulsification or after the water phase has been emulsified.
- Place any insoluble materials in a mortar. Add the emulsion formed slowly with trituration to the mortar.

Calcium hydroxide is alkaline and the high pH does not promote the growth of microorganisms. If preservatives are necessary, alcohol or methyl and propyl paraben can be used. Nascent emulsions are usually topical preparations and often include an agent that has antibacterial and antiseptic properties.

Non-ionic surfactant emulsions

These emulsions use non-ionic emulsifying agents called polysorbates and sorbitan esters (Figure 5). Most of them are based on a hydrophobic part, fatty acid or alcohol (C_{12} – C_{18}) and hydrophilic part – alcohol (– OH) and/or ethylene oxide (–OCH_2CH_2).

They are of low toxicity and less irritant, have a high degree of compatibility and less sensitive to changes in pH and addition of electrolytes.

The suggested amount of surfactant to be incorporated into emulsions is:

- 2 to 5% w/v Span® and Tween® combination for a liquid emulsion *or*
- 10 to 20% w/v of the internal phase.

The most common emulsions are those applied topically, for instance *anhydrous* absorption bases contain an emulsifier(s) that *allow* the incorporation of aqueous solutions into the base producing a water-in-oil (w/o) emulsion. These bases are:

- insoluble in water
- not water washable
- anhydrous
- able to absorb water
- emollient
- occlusive and greasy

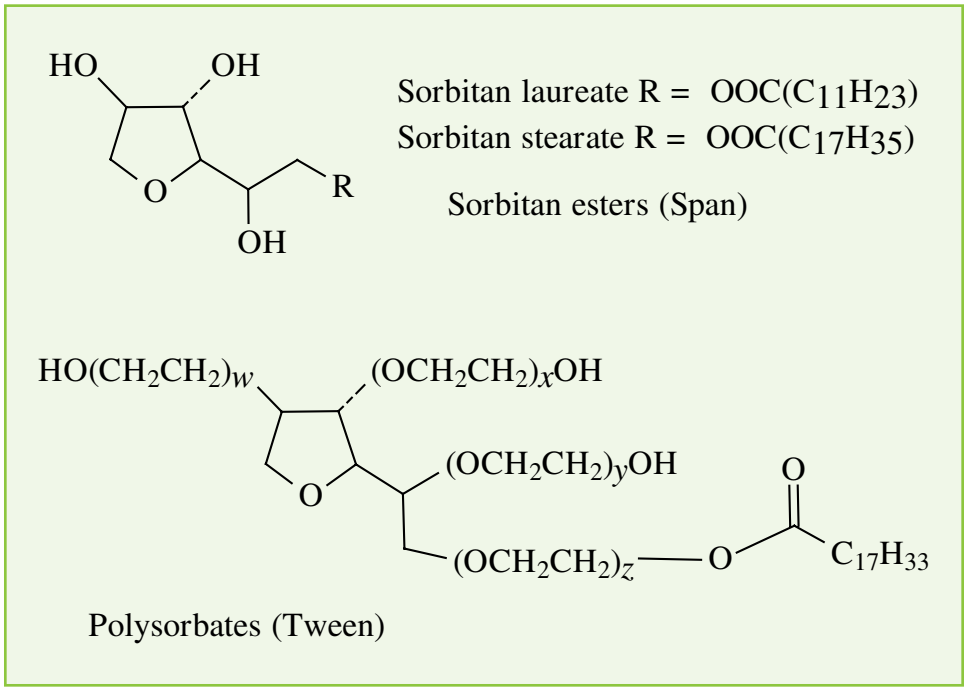

Figure 5 Chemical structures of sorbitan esters and polysorbates.

Examples of anhydrous absorption bases include Hydrophilic Petrolatum USP, Aquaphor® and lanolin.

Hydrophilic Petrolatum USP has the following formula:

Cholesterol	30 g
Stearyl alcohol	30 g
White wax	80 g
White Petrolatum	860 g

The commercial product Aquaphor® is a variation of Hydrophilic Petrolatum USP and has the formula:

Petrolatum USP	41% w/w
Mineral Oil	
Mineral wax (paraffin)	
Lanolin qs	100%

Aquaphor® can absorb three times its weight in water.

Lanolin USP is obtained from the wool of sheep (*Ovis aries*). It is a purified, wax-like substance that has been cleaned, decolorised and deodorised. It contains not more than 0.25% water. Water can be added to lanolin by mixing.

Water-in-oil absorption bases allow the incorporation of additional quantities of aqueous solutions. These bases are w/o emulsions that:

- are insoluble in water
- are not water washable
- contain water and can absorb a limited amount of water
- are emollient, occlusive and greasy

Examples of water-in-oil absorption bases include hydrous lanolin and cold cream. Hydrous lanolin has the formula:

Lanolin	700 g
Purified water	300 mL

Because lanolin is an animal product, sensitive individuals can be allergic to this substance. In this case, cold cream can be used as an alternative. Cold cream has the formula:

Cetyl esters wax	125 g
White wax	120 g
Mineral oil	560 g
Sodium borate	5 g
Purified water	190 mL

Water-removable bases are oil-in water (o/w) emulsions or creams. They are:

- insoluble in water
- water washable
- contain water and can absorb water
- not occlusive and not greasy
- allow dissipation of fluids from injured skin

Examples of oil-in-water emulsions are Hydrophilic Ointment USP and Dermbase®, a commercially available product. Hydrophilic Ointment USP has the formula:

Methylparaben	0.25 g
Propylparaben	0.15 g
Sodium lauryl sulfate	10 g
Propylene glycol	120 g
Stearyl alcohol	150 g
White petrolatum	250 g
Purified water	370 g

The term *cream* is now reserved for oil-in water emulsions. They are less emollient and protective than hydrocarbon or absorption bases. Creams also tend to dry out and crack if they are not stored properly. Those containing water may harbor microbes and preservatives must be added to the formulation to prevent this.

Topical extemporaneous preparations require an understanding of the chemistry of topical emulsions. Pharmacists are often asked to prepare these for special needs or populations of patients with dermal conditions such as eczema or psoriasis. Pharmacists are unique because they have this expertise and knowledge as part of their formal and professional training.

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3. Ansel, H.C., Pharmaceutical Dosage Forms and Drug Delivery Systems, 7th edition, Lippincott Williams & Wilkins, 1999.
4. Aulton, M. E., Pharmaceutics, The Science of Dosage Form Design, Churchill, Livingstone, 2002.

MANITOBA SOCIETY OF PHARMACISTS 2013 ELECTION TO THE BOARD OF DIRECTORS

Members are reminded that 2013 is an election year for the MSP Board of Directors. The call for nominations will be in your mailbox approximately February 1, with nominations due by March 1.

With all the changes facing pharmacy at present, this is an exciting time to represent your colleagues by sitting on the MSP Board. It's a golden opportunity to work with other dedicated pharmacists and shape the future of your profession. Is 2013 your year to step up and do your part?

For more information, feel free to contact the MSP office or any MSP board member.

An Update from your MSP Pharmacare Committee

The role of MSP's Pharmacare Committee is to work on behalf of member pharmacists, to advocate for their economic and professional interests in matters specifically relating to Manitoba Pharmacare. To achieve this goal, committee representatives hold quarterly face-to-face meetings with senior staff from Manitoba Health, including Bernadette Preun, the Assistant Deputy Minister of Provincial Policy and Programs at Manitoba Health, who chairs the meetings.

The Pharmacare Committee is essentially a liaison / clearing house for issues that affect both Manitoba Health Drug Programs and MSP members. Committee meetings will bring forward concerns from the grassroots and the MSP Board, which can be raised with Manitoba Health at a high level. Similarly, Manitoba Health may provide advance notice of proposed initiatives, to identify pharmacy concerns early in the process. Efforts are made to keep the lines of communication open for mutual benefit. Not every pharmacy advocacy body across Canada has this kind of direct access to its provincial health department, and we at MSP make every effort to use our time wisely for the benefit of our members.

ALISON DESJARDINS
Chair, Pharmacare

When presenting the annual Pharmacare Committee report at the MSP Annual General Meeting in April 2012, I extended an invitation for interested pharmacists to join the Pharmacare Committee, and was rewarded with several new volunteers who joined some experienced committee members. Currently the Pharmacare Committee members include Greg Harochaw, Heather Langtry, Britt Kural, Joss March, Amy Oliver, Penny Shefrin, Ernest Stefanson, Tobi Tse, Michael Watts, Mel Baxter (MSP President), and myself as Committee Chair. We meet by teleconference approximately every three months to prepare for the meetings with Manitoba Health. I would like to thank all the committee members for their valuable input during the teleconferences and during email discussions. Your perspectives and willing participation are much appreciated, and you deserve kudos from the colleagues you represent. Thank you!

Some topics recently raised by the Pharmacare Committee with Manitoba Health include first/second payer issues with MB Health and federal programs notably NIHB, a suggestion to streamline the bulletin appearance, the possibility that pharmacists can and should be allowed more participation in the Part 3 EDS process, drug shortages, and how pharmacists can be reimbursed for price differences during shortages. Any MSP member with an opinion on one of these issues, or another issue related to Pharmacare, is encouraged to contact the MSP office or any member of the Pharmacare committee. We will gladly add your perspective to the next committee discussion, and carry your concerns forward to Manitoba Health officials as necessary.

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Captain **BRYAN WILLOX**

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Capitaine **BRYAN WILLOX**

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An Update from your Public Relations Committee

Fall Pharmacy Awareness Advertising Campaign

Talk to Your Pharmacist – A Healthy Choice

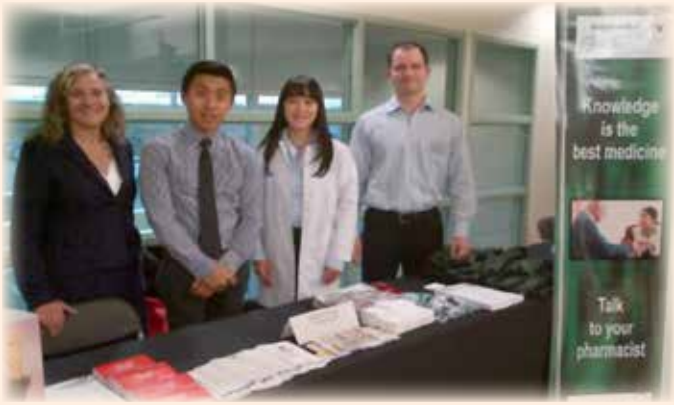
The Public Relations Committee completed phase two of the 2012 pharmacy awareness campaign. The campaign ran from October 14th to November 10th, 2012 and included Winnipeg Transit advertising, radio, and print media in the Central Plains Herald/Leader, Westman Journal, Nickelbelt News, Coffee Times, the Metro, Senior Scope and First Nations Voice.

AMY OLIVER
Chair, Public Relations

We kicked off the fall Campaign on October 12th with our pharmacy awareness booth at the Reh-Fit Centre's Annual Walk of Life and Health Fair.

Pharmacy Awareness Month (PAM) 2013

We are excited to announce the extension of our spring pharmacy awareness campaign from the week long campaign (PAW) to a full month of awareness activities! PAM 2013 will run the entire month of March. We will include interviews, radio and print ads, transit, community events, and a series of in pharmacy events. Keep your eyes open in the New Year for our email communication "Call for Volunteers" – we are encouraging all pharmacists, pharmacy students, and pharmacies in the province to take part by participating in a minimum of one pharmacy awareness activity.



Pharmacy booth at the Reh-Fit Centre
From left to right: MSP Executive Director Brenna Shearer, and pharmacists Victor Fang, Conny Kwong, and Miro Cerqueti

reh-fit centre

November 19, 2012

Ms. Amy Oliver
Manitoba Society of Pharmacists
Suite 202-90 Garry Street
Winnipeg MB R3C 4H1

Dear Ms. Oliver:

Thank you for your contribution to our 2012 Walk of Life & Health Fair which enabled us to raise over $27,000 in support of Cardiac Rehabilitation Services here at the Reh-Fit Centre.

Proceeds from the Walk of Life & Health Fair go toward important equipment and program delivery for our Cardiac Rehabilitation Services. These essential services can transform the quality of life for our many program participants by helping people to lead healthy and active lives after a cardiac event.

Over 500 participants attended this year's two-week event. Visitors were impressed with the Health Fair and the event wrapped up with a fabulous Member Barbecue.

Thank you once again for supporting the Walk of Life & Health Fair! Your commitment to the health of our community helps to change lives for the better.

We look forward to your support in 2013!

Sincerely,

Karyn Sinopoli
Membership Services Manager

Board of Directors 2012/13
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take your heart for a walk

Manitoba Cardiac Institute (Reh-Fit) Inc. 1390 Taylor Avenue Winnipeg, Manitoba R3M 3V8
Phone (204) 488-8023 Fax (204) 488-4819 Email reh-fit@reh-fit.com www.reh-fit.com

Introducing This Year's PAM Co-chairs

Bobby Currie

Bobby Currie graduated in 2008 and is currently the Associate Owner at Shoppers Drug Mart #2444 in Winnipeg. Bobby is excited to Co-Chair PAM this year and will be responsible for recruiting volunteers, working closely with CAPSI, and organizing and facilitating community and in-store events.

Barret Procyshyn

Barret Procyshyn graduated in 2009 and is currently practicing at Dauphin Clinic Pharmacy in Dauphin, Manitoba. Barret is also excited to co-chair PAM this year and will be responsible for the advertising and media components of the 2013 campaign.

The committee is actively pursuing fundraising initiatives and is striving towards a goal of $50,000 for the 2013 Spring Pharmacy Awareness Campaign. If you would like to donate to the campaign – please contact the MSP office or visit the Public Relations Committee page of the MSP website at http://www.msp.mb.ca/PRlist.php.

Pharmacist to the Rescue

On a recent visit to Vita I stopped by Dueck's Drug Store to meet with Lothar Dueck. Lothar, a pharmacist in the small community was instrumental in saving the life of his friend in the town where he works.

In early October the area near Vita was struck by fire. The fire had been brewing for a couple of days and on October 2, 2012 the neighbours in the close knit community were in the drug store expressing concern at the elevated amount of smoke and its close proximity to the town.

Lothar had only to step out the front door of the drug store to see the billowing smoke from the area across the main road. Thinking of his good friends that lived in the direction of the smoke, Lothar gave them a call to see where things were at and how they were doing. Keeping busy in the kitchen, Lothar's friend calmly answered the phone and after speaking for a bit noticed that not only was there a lot of smoke but she could now see flames.

BONITA COLLISON
Communications Officer

"I see flames but I don't have a car!" she exclaimed. Lothar assured her that he was on his way and immediately got in his car and drove toward the smoke to help his neighbour. Nearing the driveway Lothar was well aware of the smoke and flames but in the time it took for his neighbour to jump in the vehicle and to turn around, the visibility was much worse. It was to the point where Lothar said he couldn't see the road beside the car.

He drove by instinct, keeping the car level and steady. Driving through the smoke, "It was worse than any snow storm," he said. The winds were so strong and the fire was moving quickly. An evacuation order was issued for the town of Vita and within an hour the town was evacuated.

Lothar and the rescued homeowner went back to the property when they could to check on the house and the pets. They called for the two dogs and it wasn't long before the first dog appeared. Concerned for the older of the two dogs, they continued to call and sure enough the older dog appeared as well. Not only did the two dogs make it safely through the fire but 12 free roaming chickens were safe as well.

Lothar standing beside the hole where his friend's house stood prior to the fire.

The house however was gone. "We didn't think of the property when we drove away, we just wanted to get out of the fire," commented Lothar. It was just a short time later when they were able to return and the house was gone. There hadn't been any time to save anything but themselves.

All that remains now is a hole where the basement had been. The trees surrounding the property are black and charred at the bottom with many losing their bark.

When I asked how the family was doing, Lothar said they are doing well and plan to rebuild in the same spot. "It's a beautiful property and the fire isn't going to chase anyone away."

The October 2nd fire took four homes with one of them being in the town of Vita itself and the others being in the nearby area. During my visit we went for a drive through the fire affected area. Even though much of it is now snow-covered we could still see the areas where the fire had crept in and which homes and properties were damaged. Many fence posts were burnt and even more trees were black and bare of bark.

Seeing how close the fire came to several homes, it appears as though the fire had a personality. It chose where to go and where to stop. One of the homes in the town of Vita showed no damage but Lothar mentioned that one of the nearby neighbours had seen the hanging flower baskets on the front porch of the home catch fire. He took the time to pull the baskets off of the porch and throw them away from the house. The house made it through the fire.

The school was also saved but the fire had come so close that if the children hadn't been evacuated, they would have seen it from the classroom windows. In remembering the day, it was the volume of people helping out and how very hard they all worked to contain the fire that stood out the most. Lothar was very appreciative of all those who did their best for the community.

"There is a lot of work left to do but the community is strong and one of the destroyed homes has already been rebuilt," he indicated. The Vita volunteer fire department was supported by fire halls from many of the neighbouring communities and due to their hard work and the community's best efforts the damage from the fire was contained and was limited.

Scorched trees that lined the property.

An Update from your Economics Committee

The last update from the MSP Economics Committee was provided in the spring and the committee has been very busy since that time. One key initiative has been the development of the Committee Terms of Reference. The main objective of the Economics Committee is to negotiate pharmacy contracts on behalf of the members of MSP.

GREGORY HAROCHAW
Chair, Economics

The Economics Committee has been very active over the last several months with a variety of concerns raised by members regarding first and second payer and coordination of benefits for Manitoba Health and NIHB. These issues include but are not limited to reimbursement for services provided to NIHB patients who reside in personal care homes, are in palliative care, or are receiving provincial social assistance.

Currently, the Economics Committee has been corresponding with Manitoba Health and Health Canada in an effort to provide the members with clarification. Discussions are continuing.

NIHB specific issues that the Economics Committee has focused attention on include adequate reimbursement for extemporaneous compounding and audits. Over the summer, NIHB released a reimbursement structure for compounds prepared for NIHB clients (Table 1).

Table 1

CPhA Code	Examples of Extemporaneous Mixtures	Reimbursement Structure for MB Only
0 – compounded topical cream	Hydrocortisone powder & clotrimazole cream Hydrocortisone cream & clotrimazole cream Menthol ± camphor in corticosteroid cream	AAC + 1.5 DF
1 – compounded topical ointment	LCD in corticosteroid Salicylic acid in base	AAC + 1.5 DF
2 – compounded topical lotion	Menthol ± camphor in corticosteroid lotion	AAC + 1.5 DF
3 – compounded internal use liquid	Hydrochlorothiazide 5 mg/mL Spironolactone 5 mg/mL Omeprazole 2 mg/mL Lansoprazole 3 mg/mL Nitrofurantoin 10 mg/mL Domperidone 1 mg/mL Tranexamic dental mouthwash 100 mg/mL Dexamethasone 1 mg/mL Prednisone 5 mg/mL oral suspension Aldactazide 5 mg/mL	AAC + 1.75 DF
4 – compounded external powder	Requires PA. Call DEC at 1-800-580-0950 (English) or 1-800-281-5027 (French)	AAC + 1.5 DF
5 – compounded internal powder	Requires PA. Call DEC at 1-800-580-0950 (English) or 1-800-281-5027 (French)	AAC + 1.75 DF
6 – compounded injection or infusion	Requires PA. Call DEC at 1-800-580-0950 (English) or 1-800-281-5027 (French)	To be assessed on a case by case basis
7 – compounded eye/ear drop	Requires PA. Call DEC at 1-800-580-0950 (English) or 1-800-281-5027 (French)	To be assessed on a case by case basis
8 – compounded suppository	Requires PA. Call DEC at 1-800-580-0950 (English) or 1-800-281-5027 (French)	To be assessed on a case by case basis

AAC = Actual Acquisition Cost DF= Dispensing Fee PA= Prior Approval DEC= Drug Exception Centre

The Economics Committee recommends that pharmacists involved in compounding become familiar with the reimbursement structure provided by NIHB.

An NIHB Working Group has been formed to review NIHB audit issues. The Working Group is comprised of members who have contacted MSP in regards to NIHB issues. At the time of writing this report the group has held one meeting and a second meeting has been scheduled.

The Economics Committee has focused attention on negotiations with Manitoba Health for a new agreement for personal care home services. The initial meeting has taken place and a second meeting is being scheduled.

Thanks to all members of the Economics Committee, NIHB Sub-Committee and Working Group and PCH Negotiating Sub-Committee for all their efforts. Their commitment and dedication is appreciated.

2013 Preliminary Program

The 2013 Annual Manitoba Pharmacy Conference will take place at the Winnipeg Convention Centre, 375 York Ave, April 5, 6 and 7. Accommodations will be at the Delta Winnipeg, 350 St. Mary Ave. Mark the dates on your calendar and be sure to attend!

The objective of this conference is to:

- Provide educational programming to advance pharmacy practice
- Strengthen the relationships among pharmacists and other health professionals
- Enhance the quality of pharmaceutical care provided to patients
- Provide a forum for exchange of ideas among pharmacists
- Anticipate future information and professional development needs for pharmacy practice

The Annual Conference is the one opportunity pharmacists in the province have to come together to celebrate the profession of pharmacy. The Conference provides a chance to share experiences and interact with peers while participating in educational sessions that are relevant to you, your practice and the changing pharmacy environment.

The Conference is not all about learning and there are numerous opportunities to catch up with colleagues including the Friday MSP Reception. This year the evening will kick off MSP's 40th Anniversary celebration in addition to the presentation of the Young Leaders Awards. Take a look back in time to the beginning of MSP, where we have been and where we are going.

Saturday will begin with the MSP Annual General Meeting. Highlights of the meeting will include the results of the 2013 Election to the Board of Directors, results of the MSP Annual Wage and Benefits Survey, and reports from each of your MSP Committee Chairs. Come out to see what MSP has been doing for YOU.

Do you have any pharmacy issues that you would like addressed? The Issues Forum - Open Discussion is your opportunity. This open forum will allow for issues to be raised from the floor with the discussions determined by those in attendance. No topics are off limits and all comments and questions are welcome.

FRIDAY APRIL 5, 2013	
1:00-2:00 pm	Session A Practice Change Management
2:00-2:45 pm	Session B Human Resources
3:00-3:45 pm	Session C Revenue
3:45-4:30 pm	Session D Pop Culture
4:30-5:30 pm	❖ MSP 40th Anniversary Reception & Young Leaders Presentation
SATURDAY APRIL 6, 2013	
9:30-10:30 am	MSP AGM
11:00 am-12:00 pm	MPhA AGM
11:45 am-1:15 pm	❖ Buffet Lunch with Exhibitors
1:15-4:30 pm	Issues Forum
	Topic 1 Implementing Immunization into Your Work Flow
	Topic 2 The Manitoba Drug Formulary Process
	Topic 3 Chronic Pain - Managing Prescription Drug Abuse
6:00 pm	❖ Annual Awards Banquet & Silent Auction
SUNDAY APRIL 7, 2013	
8:30 am-4:00 pm	Registration Desk Open
9:00-9:30 am	Continental Breakfast
9:30 am-4:00 pm	All Day Workshop - ADAPT Medication Assessment Workshop
9:30-11:30 am	Concurrent CE Sessions
	Session E1 - Short & Snappy
	Topic 1 Herpes Zoster & Post Herpetic Neuralgia: A New Approach to Treatment & Prevention
	Topic 2 Improving Health for All
	Topic 3 Privacy
9:30-11:30 am	Session E2 Collaborative Care
11:30 am-1:00 pm	❖ MPhA Awards Luncheon
1:00-2:30/3:00 pm	Concurrent CE Sessions
	Session F1 Practice Spotlight
1:00-3:00 pm	Session F2 Catalyst Module 4: Marketing Your Smoking Cessation Service
1:00-4:00 pm	Student Preparation Session
2:45-4:00 pm	Session G - Headline New for Pharmacists
	Topic 1 Cancer Patients with DVT
	Topic 2 Adult Obesity in Manitoba: Prevalence, Associations & Outcomes
	Topic 3 Falls Prevention Program

The Conference weekend also features an opportunity to celebrate the accomplishments of outstanding colleagues in the profession. Take in the Annual Awards Banquet on Saturday evening and the Manitoba Pharmaceutical Association Awards Luncheon on Sunday afternoon and join your peers in recognizing the achievements of these esteemed individuals.

The 2013 Annual Manitoba Pharmacy Conference provides an excellent opportunity for pharmacists from all practice settings to unite in a celebration of the profession, interact with colleagues, engage in discussions, participate in education sessions, and enjoy the social events.

For more information on the 2013 Annual Manitoba Pharmacy Conference visit the Conference website at www.MBPharmacyConference.com.

Income Splitting Strategies with a Spouse

Saving tax is a topic that almost everyone is interested in. Despite rules in the Income Tax Act to limit ways to save tax, there are still some ways to accomplish tax savings through income splitting with your family members.

This article will examine some of the methods available with your spouse. The article, "Income Splitting with Children" focuses on income splitting opportunities with children.

Why Income Split?

The purpose behind income splitting is simple. It is designed to shift income from an individual in a high tax bracket to an individual in a lower tax bracket. The result is tax dollars saved and therefore more family income and more capital in the hands of the lower income individual.

Income Splitting With a Spouse

For many people, income splitting with a spouse is very attractive as many couples find themselves in different tax brackets for most of their lifetimes. Although there are attribution rules contained in the Income Tax Act that limits income splitting with your spouse, there remain some legal methods.

1. Spousal RSP

The most obvious income splitting strategy between spouses is the spousal RSP. Although there are no immediate tax savings as you still receive the deduction, there are tax savings in the future when your spouse receives income from the RSP. This income will be taxed at their marginal tax rate instead of yours.

The attribution rules will cause income to be taxed in your hands however if your spouse withdraws money from the spousal RSP and you have made a contribution in that year or the previous two years to any spousal plan.

2. Spousal Loans

Because of our current low interest rate environment now is an especially good time to consider a spousal loan. Canada Revenue Agency's (CRA) prescribed rate of interest for family loans is only 1%. Therefore, where assets are expected to produce a return that is well in excess of this rate, it makes sense to loan assets to your spouse and charge the 1% rate of interest to avoid the application of the attribution rules. The excess yield from the assets over the amount of interest charged will then effectively be transferred to the lower-income spouse without triggering the attribution rules.

How does this strategy work?

The higher income-earning spouse lends a sum of money to the lower-income spouse. Under a written loan agreement, the lower-income spouse agrees to pay interest at the prescribed rate of 1%. The lower-income spouse then invests the borrowed funds at a rate greater than 1% to make this strategy as tax effective as possible.

For example, Bob lends Sandra (the lower-income spouse) $100,000 by way of a promissory note and charges her interest of 1%. Sandra then invests this money and earns a 5% rate of return. Sandra reports $5,000 of investment income on her tax return ($100,000 * 5% rate of return) and gets a tax deduction for the $1,000 of interest she pays to Bob. ($100,000 * 1% prescribed interest rate). Bob reports on his tax return $1,000 of interest income. As a result of this $100,000 loan, $4,000 of annual income has been shifted from Bob to Sandra.

For this strategy to work Sandra must pay Bob the interest (this is tax deductible to Sandra as an interest expense) by the following January 30th of each year and Bob must report the interest received as income. This couple has effectively split income and therefore saved some tax.

One of the best advantages of this process is that you are locking in this low rate of 1% indefinitely even if the prescribed interest rate rises.

3. Pension Income Splitting

Individuals who earn income eligible for the pension income tax credit may reduce their overall household tax bill through the pension income splitting measure introduced by the federal government in October 2006. This initiative allows the higher income earning spouse to allocate up to 50% of their eligible pension income to their lower income earning spouse, where it will be taxed at their lower marginal rate.

The types of pension income eligible for income splitting will vary depending on age:

- ***For people age 65 and older,*** eligible pension income includes lifetime annuity payments under a registered pension plan (RPP), a registered retirement savings plan (RRSP) or a deferred profit sharing plan (DPSP), and payments from a registered retirement income fund (RRIF).
- ***For individuals younger than 65,*** eligible pension income includes only lifetime annuity payments from an RPP (employer-sponsored pension) and certain other payments received upon the death of a spouse or common –law partner.

4. Split Your CPP Payments

When you apply to start receiving your CPP payments, you can elect to split them with your spouse. As long as you are in a higher tax bracket this strategy makes sense as the amount of tax paid by the family will be decreased.

5. Invest Your Spouse's Excess Income

If both you and your spouse work, and there is excess income that is being invested, this income should be invested in the hands of the individual in the lower tax bracket. Therefore, the spouse with the higher income should pay all the house hold expenses, with the lower income spouse saving the excess funds in their hands. Future income on the invested funds will be taxed at a lower rate. Note that you only need to continue this strategy until both spouses are in the same tax bracket.

6. Pay Your Spouse a Salary

If you own your own business, you can pay your spouse a salary for work that they perform. Remember however that it must be reasonable in the circumstances and that usually means that you would pay your spouse the same as what you would pay someone else for work of equal value.

7. Loans to a Spouse to Start a Business

Business income is not attributable so it is possible to loan your spouse money to start their own business. Any income that they earn in the business will be taxable in their hands.

Note: The above article is for information purposes only and should not be construed as offering tax advice. Individuals should consult with their personal tax advisors before taking any action based upon the information in this article.

Public Relations Practice Spotlight

4th year pharmacy student Magkie Cheung (left) and EAL teacher Aggie Grossberndt (right)

The Public Relations Committee would like to recognize Magkie Cheung, 4th year pharmacy student, for her work within the community. Magkie chose the Winnipeg School Division, Adult English as an Additional Language (EAL) Program as her experiential site for her fourth year elective. The elective course at the Faculty of Pharmacy is a project-based course designed to provide senior pharmacy students with opportunities to explore areas in research, professional practice, or education that are not part of the required undergraduate program. The Winnipeg School Division Adult EAL Program is currently funded by the Government of Manitoba and is offered in four locations in Winnipeg. Classes accommodate approximately 1200 learners on a continuous intake basis.

The cultural backgrounds of the student population vary from year to year depending on immigration and political situations in source countries. The EAL Program provides English for settlement purposes to new immigrants in Winnipeg. During her seven weeks with the EAL program, Magkie helped educate several different classes on the role of a pharmacist and the practice of pharmacy in Canada, as well as engaging them in different activities such as learning health based vocabulary, how to ask health related questions, and how to read and understand OTC packaging and prescription labels (directions for use, expiry dates, indications, etc).

If you or someone you know are participating in community based pharmacy activities – we'd love to hear about it! Send us your story and photos to info@msp.mb.ca

Executive Director's Report

It has been a wonderful experience learning about the important work that our members do and understanding more about the contributions of the pharmacy community. In the few short months that I have been with the MSP, I have benefited from the warmth and kindness of all pharmacists I interact with. From MSP's Meet and Greet to the University of Manitoba's Mr. Pharmacy Pageant and all meetings in between, I have had the opportunity to meet many of you in person. I continue to expand these opportunities to meet and learn more about the profession and the practice of pharmacy through visits to community pharmacies. As I learn more about the great work our members do to improve the health of Manitobans, I observe firsthand how the MSP office and Board of Directors are organized to provide leadership and guidance for the profession.

We will be celebrating the MSP's 40 year anniversary since incorporation in 2013. This is a time to review our past, evaluate our priorities, and define our strategies to advance the practice of Manitoba pharmacists. I have had the chance to interact with a cross-section of the MSP membership - from those who are students, educators, and board and committee volunteers, to those working in the field and are prospective members, volunteers, and contributors. The MSP office and Board are working together to define organizational objectives to advance pharmacy practice and professional interests of our members.

DR. BRENNA SHEARER
Executive Director

Recruitment and retention of individual and corporate members is a primary activity in the MSP office. MSP was busy with the annual membership drive over the summer months. We are pleased to inform you that we are 1,059 individual MSP members strong and still growing. Pharmacist membership numbers as of November include 761 active members, 221 students, and 32 new graduates. The Corporate Membership drive began at the end of October with applications and information sent out to current and potential members.

This journal includes information about our Annual Conference being held April 5 to 7, 2013. The Manitoba Pharmacy Conference provides up to date information about the practice of pharmacy, opportunities for continuing education and growth, and the chance to network and socialize with your colleagues. Additionally, the MSP Annual General Meeting will be held during the conference weekend. This year is a Board election year. Being a volunteer Board Member is an important role and we need partners in our advocacy role. Please consider sharing your expertise and knowledge of pharmacy this year and complete a nomination form for a Board position.

Here are a few initiatives that we have been working on at the MSP office since my arrival in September:

Pan-Canadian Generic Drug Tendering Process

The Health Care Innovation Working Group of the Council of the Federation is actively working on a Pan-Canadian process for generic drug purchasing with Saskatchewan and Alberta co-leading the generic drug value price initiative. Weekly meetings organized by CPhA, CACDS, and CGPA were initiated to establish a common approach to responding to this initiative and to coordinate their efforts and messaging.

The Saskatchewan Government, Department of Health circulated a request for response from each provincial association early in November, 2012. Advocating on behalf of the profession, MSP provided a response with a focus on the issues and consequences of supply shortages and inventory management. To promote the role of the pharmacist, MSP also reinforced the underutilization of Manitoba pharmacists as an issue needing to be addressed to improve health care for Manitobans.

Manitoba Pharmacist Initiated Smoking Cessation Proposal

Following a meeting between MPhA and Minister Rondeau, Minister of Healthy Living, Seniors and Consumer Affairs in September, MSP partnered with MPhA and the Faculty of Pharmacy, University of Manitoba, to develop a smoking cessation proposal where pharmacists in the province would take the lead in a smoking reduction and cessation program. At the time of writing this article, a meeting with the Department of Healthy Living, Seniors and Consumer Affairs was scheduled in December to review the proposal.

Electronic Communication to Members

The MSP office has been developing strategies to organize MSP electronic emails to members. Initial efforts have focused on amalgamating the content of Communication Plus and member benefits. The electronic emails are an important source of information about the activities and priorities of the MSP. We rely on regular communication with our members to solicit feedback and promote interactive dialogue. We also realize that to be effective, we need to organize our communication in time and content. As we work to improve our communications to you, please know that we are always open to hearing from our members at any time.

Strategic Initiatives

Strategic planning initiatives have been initiated through internal and external stakeholder interviews and include a cross-section of MSP stakeholders and partners. The interviews have helped to collect valuable perspectives from those who have or may contribute to the success of the MSP. Consultations with other Canadian provincial associations have provided valuable information about membership and insurance programs, status of professional practice advancements, priority areas for development and action, role in continuing education, and opportunities to collaborate in areas of common interest. The findings from the internal and external stakeholder review, as part of a strategic planning process, will be utilized to facilitate the review of MSP's vision and mission and to develop consensus-based strategic priorities for the MSP staff and Board in the New Year.

Visits to Pharmacies

To augment orientation to the Executive Director role and to initiate opportunities to meet with our membership, I have initiated going out to pharmacies to meet pharmacists and their staff and to learn firsthand how pharmacies operate, their issues, and their unique strengths and contributions to the practice of pharmacy. Pharmacies visited to date or to be visited in the next few months include Loblaw (Winnipeg - Kenaston), Super Thrifty in Morris, Pharmacie Seine in Ste-Anne, Shoppers Drug Mart(Winnipeg – Pembina), and a trip to Western Manitoba to visit pharmacies in Birtle, Brandon and surrounding areas in January is in early planning stages.

Dr. Shearer with the staff of Loblaw (Kenaston Blvd.). Pictured from left to right: Claire Rosario, Sean Alleyne, Tan Luong, Dr. Brenna Shearer, Miro Cerqueti, and Michael Stevens.

As always, we welcome your feedback, suggestions and conversations. Please feel free to contact myself or any of the staff out our office by email or phone.

Q&A: GETTING TO KNOW YOUR MANITOBA PHARMACISTS

Name: **Bobby Currie**

Place/Year of Graduation: University of Manitoba, 2008

Years in Practice: 4

Currently Working: I am an Associate Owner of Shoppers Drug Mart #2444 (the Roblin and Dale location).

Accomplishments in pharmacy: During university I stayed interested and involved in student government both locally at the University of Manitoba as a class president and nationally with CAPSI (Canadian Associate of Pharmacy Students and Interns) as the U of M Junior and Senior Representative. When I graduated I wanted to get my CDE, my CRE, and every other designation I could find. What I didn't expect was to discover an interest in business. My first two years after graduation, I worked at the Shoppers Drug Mart in Winkler, MB, wanting to find my feet in a rural setting. My Associate there, Zahid Zehri, was very encouraging and I found myself drawn to the idea of having my own store. I returned to Winnipeg in the fall of 2010 to my current store in the Charleswood area. The flexibility of my position means that I have been able to participate in several programs that interest me including student mentorship through the U of M's SPEP program, methadone training through MPhA, compression stocking training, the QUIT program and injections training. I look forward to the opportunity to use that last one! I am also looking forward to volunteering with MSP to help organize this coming year's Pharmacist Awareness Month. I've always wanted to support the expanding scope of pharmacy practice and I'm happy that I've found a position that allows me to do that.

Hobbies: I love to cook and bake whenever I can. I think one of my favourite things to do is put some music on and make a huge mess in the kitchen. Reading has always been a favourite pastime and, a few months ago, I organized a book club with a few friends. We've had a lot of interesting picks that are definitely expanding my horizons! Truthfully though, having an excuse to get together and open a bottle of wine is probably the best part. I also try to get outside regularly and all of this snow is inspiring me to finally buy some snowshoes.

Favorite thing about Manitoba: Manitobans have an excellent lake culture. "Going to the lake" is basically the holy grail of summer activities and I love it!

Most relaxing vacation choice: Last spring a friend and I travelled to Nicaragua. We toured a few different areas before settling into the most relaxing place I can imagine... A tiny island 'eco-lodge' in Lake Nicaragua. Accessible only by a highly irregular boat, it forced us to slow down and really enjoy our beautiful, exotic location. The amazing food, lakeside spa and sunrise yoga classes didn't hurt either!

Pet peeves: Drivers that don't signal.

Favorite fictional character and why: It's so hard to choose, but right now it's Flavia de Luce. Who doesn't love a precocious, 11-year-old, genius with an obsession for poisons and sleuthing?

What could you do without forever: Cable TV.

What couldn't you do without for even a day: The internet.

What you love about pharmacy: I love being able to solve people's problems. For me, the very best thing about this job is the satisfaction of fitting all the puzzle pieces together and coming up with an answer that works for everyone.

Do you know someone who is making a difference in the pharmacy community? We would like to highlight them in this article! Please contact the MSP office at (204) 956-6681 or info@msp.mb.ca.

Take This and Call Me in the Morning

Do prescribed drugs and therapies work as intended? It's a broad question and, as we know, most do. Yet how effective they are is quite another thing and in that problem lies a wealth of ways that the companies that sell the pills and procedures can make them seem to work a great deal better. Research that tests a hypothesis distilled from a database which is then tested against the same database may be meaningless. Hype can overpower health skepticism. So let's indulge in a bit of the latter.

ANDREW ALLENTUCK

You might ask the first question, which is both empirical and rhetorical: "better than what?" Let's take a journey to find out how drugs that have at least some efficacy can be turned from modest analgesics into powerful cures.

Imagine that a patient has a routine illness, a cold, perhaps. From inception to termination, perhaps a week to ten days, there will be a sense of unease, then respiratory congestion, perhaps a mild fever, lethargy and then, in due course, comes recovery.

Let's say the patient sees his or her physician or pharmacist and gets a drug that promises alleviation of symptoms. If we put congestion and other symptoms on the vertical axis of graph paper and time in days on the horizontal axis, then the drug given on day two will seem to do little immediate good, for the patient is going to get worse in the cold's cycle. If given in the middle of the episode, say at day 5, it will follow the natural recovery shown by the parabola of rising illness, then falling illness and seem like a splendid drug. If given at the end, it will seem of little consequence. Timing, as they say in the standup comedy business, is everything.

The active ingredients in the drug's perceived efficacy have been:

1) Its action as a molecule. We'll give it that and say it is biologically potent.

2) Time of administration, our key variable.

3) Other drugs that may be taken which cloud the issue.

4) The general health of the patient, affecting outcomes.

5) How the treatment is reported.

6) How the database is analyzed.

Drug research and innovation is expensive, so clinical drug trials are mostly financed by drug companies. They don't want to waste shareholder money, so they set up their trials to produce the most useful outcomes. The audience reaction is in the staging, after all.

Drug makers select volunteers for Phase III trials in which the efficacy of the drug is tested against placebos and perhaps against other similar drugs. If the drug is to affect one condition, the best volunteers will have it and nothing else. Why cloud the issue?

Trouble is if the drug is for a disease with many complications, the "pure" subject may not be representative of the population of patients with the drug.

If the drug test is to determine something that does not happen very often, say mortality caused by an obscure disease, rarity will cause problems. Let's use tularemia, alias rabbit fever, one of my favorite rare diseases. It is caused by, among other things, contact with rabbits and muskrats. Since 2000, there have been outbreaks in Massachusetts, Georgia (the country, not the American state), Spain and, in 2009, in British Columbia. Infections occur in one person per million population per year. It can be fatal to people, depending on the variant of the disease. The overall mortality rate is just 1%.

What treatment works? Broad spectrum antibiotics including tetracyclines take care of it. The problem is judging how well the drugs work. Finding a real case is tough. Getting clinical evidence is harder. Most of all, in trying to find what drug best cures this rare illness, there is the problem of statistical significance.

If a drug is being tested and if it has a probable effectiveness, then the larger the study and the more incidents that are studied of affected persons, the more the meaningful results will cluster around what will turn out to be the cure rate of the drug. Small trials on a drug that is used on rare illnesses or even trials of effective drugs used on common diseases may vary from the mean return. The plot of the results should show a bell curve when sample size is on the vertical axis of our graph paper and reported effect is on the bottom. In other words, the smaller the test group on, say, a drug that works half of the time, the greater will be the deviation from the mean, in this case, the properly determined, broad population effect of the drug.

Meta-analyses that compare drug studies will find an average outcome if all the studies are clumped together. If the studies are weighted by size, the big ones win. But meta-analysis managers, who may be drug industry statisticians, can tweak their studies of studies by having the ones they like reproduced with small changes in data. That can produce more studies for the meta-analysis, notes British physician Ben Goldacre in his book, Bad Science, first published in 2008 and a transatlantic bestseller in the statistical exposé category.

Meta-analysts scour scientific journals for studies they wish to count in their tallies. Drug companies know this and will therefore try to get their data into big journals such as

The Lancet and the New England Journal of Medicine. They try to hide bad outcomes in company data files which, they say, they will make available to researchers on request.

If the drug in question has an unfortunate outcome in one in 50,000 patients, controlled Phase III studies on volunteers will be of little help. Only broad population studies suffice. That's when drugs get their real test, when unexpected reactions occur, and drugs are withdrawn from the market.

Let's say that a drug should work, but that the thing to be studied, deaths from what the drug treats, is hard to find. Ordinary heart attacks do not usually result in autopsies. So some drug researchers use the next best thing, blood or other studies to find what causes death. In 2002, two drug companies began a trial of ezetimibe, a molecule that was intended to reduce cholesterol. Rather than doing investigations to find what the drug did for morbidity and mortality, they did serology, Goldacre reported. The outcome was that the drug did indeed reduce serum cholesterol. What it did for heart disease was another matter. It did more than straight statins, but slow release niacin did the same thing as ezetimibe at a fraction of the cost. There were adverse side effects from the new drug such as thickening of cardiac arteries and increased production of plaque. Ezetimibe appears now to be useful for cases in which statins cannot be prescribed or do not work, but the statistical studies have been perplexing, to say the least.

The problem of finding if a drug works well often comes down to the measure of natural occurrence versus relative occurrence. It's the small number problem in a clinical setting. If you know that a condition naturally occurs in two people per 100,000, and then if a study finds one more case, the natural occurrence is still extremely rare, but the relative occurrence jumps by half. Newspapers love to report this stuff, for example, jumps in the crime rate when the base numbers are small. Murders rise from 60 in one year in a town of 600,000 people to 63 the next. The natural rate is up by five 10,000ths of one per cent. But a newspaper can trumpet the increase of 60 to 65 as an 8.3 per cent jump, an epidemic of mayhem on the streets. The truth is in the numbers, which remain small.

Finally, take the case in which a test for a rare disease finds one case in 100,000 people. But if the test error rate is also one in 100,000, then the findings will be ambiguous, to say the least. Researchers can test for statistical significance and try to eliminate biases such as the incentive to find desired outcomes. When the occurrence rate of a cure approaches the test error rate, prescription is questionable at best. When it is only timing that influences outcome, then "call me in the morning," is more than a way of putting off patients. It is an acknowledgment that the best pill is often one given when recovery is already underway.

Oguzhan Ozturk
Consultant

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