INPHARMATION UPDATE

Canadian Society of Hospital Pharmacists Alberta Branch



Société canadienne des pharmaciens d'hôpitaux



January/ February 2020

Inside this issue:

- 2 Banff Seminar Teaser
- 3-4 CSHP-AB Volunteer Highlights
- 5 Student Column
- 6-7 CSHP National Update
- 8-9 Short and Snappy Clinical Overviews
- 10 CSHP-AB PAM Mini Grants
- 11 Pharmacy vs Dentistry Hockey Game
- 12 Alberta MAiD Study

Mark your calendars!
46th Annual
Western Branches
Banff Seminar
Banff, AB
March 13-15, 2020

Follow us on Facebook, Twitter, and Instagram!

www.facebook.com/cshpab www.twitter.com/cshp_ab www.instagram.com/cshp_ab







Western Branches, Canadian Society of Hospital Pharmacists BRITISH COLUMBIA - ALBERTA - SASKATCHEWAN - MANITOBA

The 2020 Banff Seminar Planning Committee is excited to welcome you to the 46th Annual CSHP Western Branches Banff Seminar! Our conference will take place in beautiful Banff, Alberta, from March 13 to 15, 2020 under the theme of "Vision 20/20." In 2020, we are looking back at what we have accomplished as a profession (as hindsight is 20/20) and getting swept away into the Roaring Twenties, a time of significant change across our profession and within our institutions.

Our educational program is fabulous once again. Friday will feature discussions on preceptor pearls and the impact of climate change on health, as well as our highly anticipated panel discussion on professional abstinence. The evening will wrap up with a Friday night social event that you won't want to miss!

Saturday morning, you will hear our keynote speaker, Lisa Belanger, share insights from behavioral science research and how this can be applied in the workplace to optimize the performance, productivity, and innovation of leaders and teams. Once again, we will have facilitated posters on Saturday to feature the excellent research that our colleagues are taking part in. Saturday will conclude with a banquet and entertainment. A shorter program will follow on Sunday.

For full details, check out our app!

We look forward to seeing everyone again in Banff, Alberta, this spring!

Dalyce Zuk Chair, 2020 CSHP Western Branches Banff Seminar

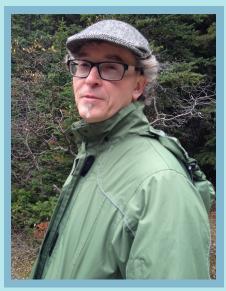


CSHP-AB Volunteer Highlights

lan Creurer Branch delegate

What I do for work: I practice in hospital pharmacy administration; I have had different Director roles within Alberta Health Services, and my current one has me leading the transformation of provincial medication production and distribution processes to a highly standardized and more centralized model.

What you may not know about my CSHP role: I participate in directionsetting and decision-making for the national organization on the National CSHP Board. There are a number of significant initiatives and major changes occurring within CSHP as the Society adapts to changes in the environment of pharmacy practice in hospitals and similar settings. Efforts to shore up the financial stability of CSHP, restructure its committees, and set a strong strategic direction for the coming years are some of the highlights at this time.





What I do for work: I am currently working in a project role as one of the Connect Care Implementation Leads for Pharmacy Services in the Central Zone. My job is to prepare for and manage changes related to the new clinical information system that Alberta Health Services is adopting.

Melissa Chung Secretary and PAM Committee Chairperson

What's happening with PAM right now: We're collaborating with PTSA again on pins this year - there are seven pin designs in total, including one for pharmacy students, two that are specific for pharmacy technicians, and one that can be worn by non-pharmacy people. I have been providing input on the national CSHP. PAM campaign. This year's tagline is "31 Days to Celebrate Hospital Pharmacy." We are encouraging members to post on social media with #PAM2020 and consider organising activities at their own work sites. We will provide a link to the CSHP National PAM Planning Guide and other resources. Resources are coming in late February - so watch out for them!

Siobhan Gallivan

Awards Committee Chairperson

What I do for work: I work as a clinical pharmacist on the surgical unit at the QEII Hospital in Grande Prairie. The unit provides general, orthopedic, and spinal surgeries for patients across the entire Northwest Zone. Our primary focus on the unit is optimizing anticoagulation and antimicrobial therapy.

Why I enjoy volunteering for CSHP: For me, CSHP is an opportunity to come together with hospital pharmacists province-wide to collaborate, learn, and focus on excellence in providing patient care. Beyond that, with my experiences working in High Prairie and now Grande Prairie, I feel fortunate to have the opportunity to bring a rural and northern perspective and voice to CSHP council meetings for the 2019-2020 year.



CSHP-AB Volunteer Highlights



What I do for work: I work in Cardiac Surgery at the Foothills Medical Centre.

Cheryl Harten

Educational Services Committee Chairperson

What's happening in the Education Committee: The education committee is currently working hard to secure sponsorship and develop an excellent program for CABS 2020 on October 3 and 4 in Calgary. **Spoiler: This year's Sunday workshop topic is Infectious Disease, so save the date!**

Daniel Leung

What I do for work: I practice at the Red Deer Regional Hospital Centre in Acute Stroke and Neurology.

What I like about my portfolio: One thing I enjoy about the Treasurer role is that it is a true test of your organizational skills and meticulousness you'll only know if you were successful when you're preparing the budget for the next year!





Mina Nagib Student Committee Chairperson

What I do for work: Aside from school, I primarily work in inner city health (addictions, infectious disease, and mental health) at Mint Health + Drugs: CMP. I am also a casual pharmacy student at the AHS Northern Alberta Program which provides ambulatory care to HIV positive individuals. What I like about my portfolio: The best thing I like about my role is the duty to represent CSHP and hospital practice on campus. Pharmacy students are very excited to attend CSHP events as it gives them a sense of belonging and professionalism. My role as the CSHP representative means that I receive a lot of questions about hospital practice and CSHP from students and I get to lead, plan, and advocate for CSHP initiatives.

Dalyce Zuk Banff Seminar Planning Committee Chairperson

What I do for work: I am the Clinical Practice Manager for Provincial Operations and my current clinical practice is in the Pulmonary Hypertension Clinic at the Peter Lougheed Centre.

What's happening with my portfolio right now: My team is working full steam ahead on final planning for the Banff Conference to be held in March 2020. We have an excellent lineup for the weekend. Registration is already available and we guarantee a great speaker lineup.



Student Column

During this past year, the CSHP-AB Student Committee has worked hard to promote hospital pharmacy across campus at the University of Alberta. Mina Nagib is this year's elected CSHP representative and chair of the student committee. Under his guidance, CSHP has already hosted several events, with many more to come.

The academic year began with the annual CSHP Student Symposium where CSHP's role in our profession as pharmacists was discussed, and the benefits of becoming a CSHP member were highlighted. Dr. Breault, CSHP-AB President, spoke to the students about his experiences with CSHP and how it has contributed to his success in both hospital and academic settings. In November, the CSHP Alumni Host Event took place where four pharmacists from various practices discussed their day-to-day life as a pharmacist and answered questions from the audience. This event was open to both students and pharmacists in our community, which provided a wonderful opportunity for students to learn more about hospital pharmacy and make connections with practicing pharmacists. "A Day in the Life of a Hospital Pharmacist" wrapped up 2019 with five hospital pharmacists sharing aspects of their daily practice. Unlike our Host Event, this event was only open to students and was formatted to give the students an indepth look at what each of these pharmacists do on a daily basis.

With the start of the new semester, the CSHP-AB Student Committee has already begun planning events for the upcoming months. Some of these events include the CSHP Summer Hospital Position Panel, Residency Information Session, and Career Night. Stay tuned for future updates from the CSHP-AB Student Committee!

Cody Thompson

CSHP-AB Communications/ Membership Committee

Mina Nagib

CSHP-AB Student Committee Chair

Student Symposium





Alumni Host Event

A Day in the Life of a Hospital Pharmacist



CSHP National Update

CSHP Executive for 2019-2020

As of the Annual General Meeting held in October 2019 in Dartmouth, NS, the following individuals form the CSHP Executive for the 2019-2020 year:

President – Tania Mysak (Edmonton, AB)

President-Elect – Zach Dumont (Regina, SK)

Past President – Doug Doucette (Moncton, NB)

Treasurer – Tamar Koleba (started January 2020)

Executive Director – Jody Ciufo (Ottawa, ON)

Changes to CSHP staff

New CEO Jody Ciufo began in January 2019, and has brought many changes and put strategies in place to begin to address significant issues facing CSHP.

Clara Wicke began as CSHP's first Director of Marketing and Communications in May 2019.

Following the retirement of Cathy Lyder as Director, Professional Practice, this area was significantly restructured, with Christina Adams named as the inaugural Chief Pharmacy Officer.

Financial Position

The 2018-2019 fiscal year ended with a deficit of \$312,000, as projected.

Strategy Towards Sustainability: From now until 2023, CSHP will spend close to \$1 million to transform into a relevant, thriving, and financially sustainable organization. CSHP will become more member-driven, offering more programs, services, educational opportunities, and relevance to today's generation of members, supporters, and students. This is a co-investment strategy, with funds coming from National, Branches, and affiliated board reserves.

Membership

The membership year ended with 2572 members, 32 pharmacy technicians, 125 non-student supporters, and 387 student supporters. Efforts to grow membership are a key aspect of the Strategy Towards Sustainability.

Strategic plan

As our 2015-2020 Strategic Plan comes to an end, the planning phase for 2020 and beyond is well underway. A draft for input was circulated to Branch Council executives in December 2019, and will soon be finalized and shared with all members.

Annual Report 2018-2019

The first annual report in quite some time was released in a special edition of Interaction News from CSHP on December 20, 2019 and posted on the CSHP website. In an engaging format, it proudly displays the many activities and accomplishments of the Society and its members.

CSHP 2019 National Survey

Following an excellent response rate, the results of this survey are being shared with members in installments. So far, topics have included the breakdown of respo<mark>ndents, value of membership,</mark> and membership for technicians more installments are coming.

CSHP National Update

Next Generation of CSHP Committees

CSHP Committees have been significantly restructured. Two new overarching standing committees have been created, with previous committees brought under these or retired. As well, a mechanism has been established to form additional expert working groups on specific issues and policies:

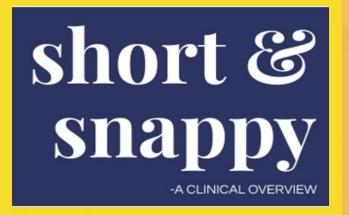
- Pharmacy Practice Vision Committee (Standing Committee)
 - Makes recommendations that affect the profession as a whole, such as pharmacy practice standards and quality, professional ethics, inter-professional collaboration, application of technology in the medicationuse process, efficiency and safety of medication-use systems, practitioner activities in public health and for individual patients, and others.
- Education and Development Committee (Standing Committee)
 - Makes recommendations on topics including competence, student education, post-graduate education and training, workforce, evidence-based use of medicines, benefits and risks of drug products, application of drug information in practice, etc.
- **Expert Working Groups**
 - Following current practice, the Board recognized the need to prepare expert-based responses to specific issues, policies, and practice. Current examples include the Pharmacy Technician Task Force, Cannabis Task Force, and the Compounding Steering Committee.
- A new category of "Networks" has been created. They are advisory in nature and serve to share strategies and information among branches and the national association. The three initial networks are Presidential Officer Network, Membership Network, and the Student Network.
- The following committees have been disbanded:
 - Research Committee: Is now a sub-group of the Pharmacy Practice Vision Committee.
 - Membership Committee: Converted to an advisory group for the office.
 - Advocacy Committee: Will no longer be a CSHP committee, and instead, will be convened as a working group as the need arises.
 - Bylaw Committee: Converted to ad hoc working groups to liaise with the office/Executive/other committees when bylaw revisions are contemplated.
 - Pharmacy Practice Publications Steering Committee
 - Pharmacy Specialty Networks Coordinating Committee
 - Excellence in Pharmacy Practice: This will no longer be a standalone project, but instead, will permeate the work of the Society in everything they do.

Professional Practice Conference (PPC)

PPC 2019 marked the 50th anniversary of this national CSHP conference. PPC 2020 took place February 1-4, 2020 in Toronto.

Upcoming CSHP Events

The next Annual General Meeting will be held in Fall 2020 in Charlottetown, PEI. Looking ahead, Alberta Branch will host the CSHP Annual General Meeting in 2021 in Edmonton! SHEDWY



Mitigating Antipsychotic-Induced Weight Gain: Is Metformin the **Answer?**

Hannah Kaliel, BSc. PharmD Pharmacy Resident, Edmonton Zone

Clinical issue:

- The standardized mortality ratio in schizophrenia is 1.5 times that of the general population. [1] Much of this mortality risk stems from cardiovascular disease. [1,2]
- Antipsychotics are used in the treatment of many mental health disorders. Second-generation antipsychotics in particular are associated with weight gain and other metabolic complications that increase cardiovascular risk, including dyslipidemia, insulin resistance, and diabetes. [1-4]
- Among antipsychotics, clozapine and olanzapine generally have the highest risk of weight gain, while aripiprazole, lurasidone, and ziprasidone have the lowest risk. [1,3]
- <u>Clinical question</u>: In patients on second-generation antipsychotics, can metformin prevent and/or treat antipsychotic-induced weight gain and other metabolic complications?

Review of the literature:

- A meta-analysis of 12 RCTs (n=743) found that in patients treated with antipsychotics, metformin treatment resulted in significantly better anthropometric and metabolic parameters than placebo with a mean change in weight of -3.27 kg [95% CI -4.66 to -1.89; p <0.001]. [1] - Metformin appeared to be more effective in preventing weight gain in first episode patients than in chronic patients who already gained weight [-5.94 kg vs. -2.06 kg].
 - Metformin doses ranged from 500-2550 mg/day, with the majority using 1000 mg/day.
- A second meta-analysis of 21 RCTs (n=1547) demonstrated that metformin was significantly superior to placebo in the primary outcome measures of body weight, body mass index, fasting glucose, fasting insulin, triglycerides, and total cholesterol. [4]
- Adverse effects in RCTs did not differ between metformin and placebo-treated participants. Nausea, abdominal pain, and diarrhea can be lessened with a gradual increase in dose. [2]
- Many of the studies included some aspect of lifestyle management. No studies reported data on whether transition to diabetes was reduced in metformin versus placebo groups, or whether metformin provided a mortality benefit in these patients. [2]

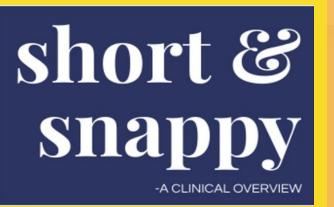
Recommended approach:

Metformin may be modestly beneficial for preventing weight gain or promoting weight loss in patients taking antipsychotic medications. [5] Other beneficial strategies include providing patients with advice on diet and lifestyle modifications, and switching to an antipsychotic with less risk of weight gain. [1] For those started on metformin, ongoing monitoring of renal function and adverse effects is required.

1. de Silva VA, Suraweera C, Ratnatunga SS, Dayabandara M, Wanniarachchi N, Hanwella R. Metformin in prevention and treatment of antipsychotic induced weight gain: a systematic review and meta-analysis. BMC Psychiatry. 2016 Dec;16(1):341. 2. Cooper SJ, et al. BAP guidelines on the management of weight gain, metabolic disturbances and cardiovascular risk associated with psychosis and antipsychotic drug treatment. J Psychopharmacol (Oxf). 2016 Aug;30(8):717-48.

3. G. Fiedorowicz J, D. Miller D, R. Bishop J, A. Calarge C, L. Ellingrod V, G. Haynes W. Systematic Review and Meta-analysis of Pharmacological Interventions for Weight Gain from Antipsychotics and Mood Stabilizers. Curr Psychiatry Rev. 2012 Feb 1;8(1):25-36.

4. Zheng W, Li X-B, Tang Y-L, Xiang Y-Q, Wang C-Y, de Leon J. Metformin for Weight Gain and Metabolic Abnormalities Associated With Actions the first treatment when Applicated Placebe Controlled Triple J. Clip Psychopharmacol. 2014. Octabilities 18. Antipsychotic Treatment: Meta-Analysis of Randomized Placebo-Controlled Trials. J Clin Psychopharmacol. 2015 Oct;35(5):499–509. 5. Garvey WT, Mechanick JI, Brett EM, Garber AJ, Hurley DL, Jastreboff AM, et al. American Association of Clinical Endocrinologists and American College of Endocrinology Clinical Practice Guidelines for Medical Care of Patient with Obesity. Endocr Pract. 2016 Jul;22(Supplement 3):1-203.



Under Pressure: Octreotide in **Hepatorenal Syndrome**

Theresa Eberhardt, PharmD Pharmacy Resident, Edmonton Zone

Case: 50-year-old male presented with an altered level of consciousness, blood pressure of 95/65 mmHg, and acute kidney injury (SCr 152 mcmol/L from baseline 60 mcmol/L). Past medical history included alcoholic cirrhosis, ascites, esophageal varices, and spontaneous bacterial peritonitis. Midodrine and octreotide were started for possible hepatorenal syndrome.

Hepatorenal syndrome (HRS): Renal dysfunction associated with chronic liver disease, not attributed to other causes, [1]

Clinical Question: In patients with hepatorenal syndrome, to what degree does octreotide improve mean arterial pressure (MAP) and renal function compared to other vasopressors?

Portal hypertension

> Splanchnic vasodilation

RAAS activation

Renal vasoconstriction

AKI (Type 1 HRS) or CKD (Type 2 HRS)

	Design (n)	Regimen	MAP Effects	Renal Effects
Kiser 2005	Retrospective	Vasopressin infusion 0.01-0.8	Reported as	38% vs 0% complete
[2]	cohort (43)	units/hr vs octreotide infusion	responders or not	response (SCr < 133
		50-120 mcg/h	instead of per drug	mcmol/L)
Cavallin	Randomized	Terlipressin 3-12 mg/h infusion	82 vs 75 mmHg,	Terlipressin superior
2015 [3]	controlled	vs midodrine 7.5 mg tid +	p=0.05	(SCr <133 mcmol/L or
	trial (49)	octreotide 100-200 mcg SC tid		50% decrease): 70.4%
				vs 28.6%, p=0.01
Tavakkoli	Randomized	Norepinephrine 0.1-0.7	12 vs 11 mmHg	72% vs 75% complete
2012 [4]	controlled	mcg/kg/min vs	increase	response (≥ 30%
	trial (23)	Midodrine 5-15 mg tid +	(p-values not	decrease in SCr or SCr <
		octreotide 100-200 mcg SC tid	reported)	133 mcmol/L)

Bottom line: Previous studies have shown possible improvement in renal function with octreotide. [5] In small RCTs, octreotide was less effective than vasopressors in improving MAP and renal function. [2-4] However, octreotide may be administered in non-ICU settings as constant monitoring is not required. [1] This makes it an option for less critical patients, often in combination with midodrine and albumin with the goal of further MAP support and renal function improvement.

1. DynaMed [Internet]. Ipswich (MA): 1995 - . Hepatorenal Syndrome; [updated 2018 Nov 30, cited 2020 Jan 24]. Available from https://www.dynamed.com. Registration and login required.

2. Kiser TH, Fish DN, Obritsch MD, Jung R, MacLaren R, Parikh CR. Vasopressin, not octreotide, may be beneficial in the treatment of hepatorenal syndrome: a retrospective study. Nephrol Dial Transplant. 2005 Sep 1:20(9):1813–20.

3. Cavallin M, Kamath PS, Merli M, Fasolato S, Toniutto P, Salerno F, et al. Terlipressin plus albumin versus midodrine and octreotide plus albumin in the treatment of hepatorenal syndrome: A randomized trial. Hepatology. 2015 Oct 27:567–74.

4. Tavakkoli H, Yazdanpanah K, Mansourian M. Noradrenalin Versus the Combination of Midodrine and Octreotide in Patients with Hepatorenal

Syndrome: Randomized Clinical Trial. Int J Prev Med. 2012 Nov;3(11):764-9.

5. Pomier-Layrargues G, Paquin SC, Hassoun Z, Lafortune M, Tran A. Octreotide in hepatorenal syndrome: A randomized, double-blind, placebocontrolled, crossover study. Hepatology. 2003;38(1):238-43.



What are you doing for PAM this year? Is your site planning any PAM activities?

Let us know and we may reimburse your team's expenses up to \$50!

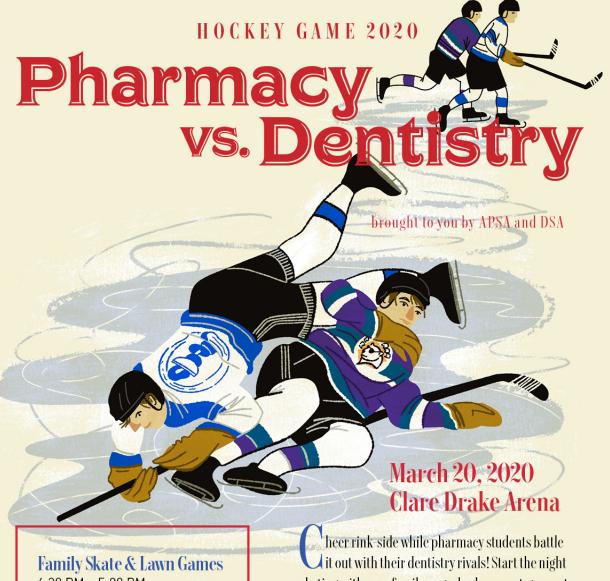
Any CSHP-AB member or supporter can apply on behalf of their team https://forms.gle/PMGokm3F93baP3Wo7

See the CSHP-AB website for more information: www.cshp.ca/alberta

PAM resources and ideas are available for free on the national CSHP website:

https://www.cshp.ca/pharmacy-awareness-month





4:30 PM - 5:00 PM

The Game

5:15 PM - 7:30PM

The PAA After-Party

7:30 PM - 9:30 PM Room at the Top, Student Union Building Sponsored by the Pharmacy Alumni Association

skating with your family or grab a beer post-game at the PAA's after-party. You won't want to miss it.

Tickets: \$10/person // Kids attend for free

Buy your tickets today at **ualberta.ca/pharmacy**

All proceeds go to Diabetes Canada. Food and beverages available for purchase all night.

Thank you to our generous sponsor for supporting this event.



Canadian Society of Hospital Pharmacists Alberta Branch



Société canadienne des pharmaciens d'hôpitaux

Alberta MAiD Study Hospital Pharmacists

You are invited to participate in the Alberta portion of an international study on pharmacists' roles and experiences with MAiD. If you have experience related to any aspect to MAiD, including a decision not to be involved with MAiD, you are eligible to participate in the study. Your time commitment will consist of an interview with one of the research study team members, requiring approximately one hour. Results will be used to identify ways to support pharmacists, develop education, and disseminate information about pharmacists' experiences with MAiD. The University of Alberta Ethics Board approved the study.

If you are interested in the study or if you have any questions, please contact terri.schindel@ualberta.ca or call 780-492-6134.

Follow us on Facebook, Twitter, and Instagram!

www.facebook.com/cshpab www.twitter.com/cshp ab www.instagram.com/cshp_ab





