# 100 IN REVIEW

HOSPITAL PHARMACY IN ONTARIO

Canadian Society of Hospital Pharmacists



Société canadienne des pharmaciens d'hôpitaux

FALL ISSUE 2022

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#### TABLE OF CONTENTS

- 2 President's Address | Rita Dhami Note from the Outgoing Editor | Andrea Beaman
- 4 Chapter Corner: Southwestern Chapter Residency Night | highlights of the projects presented by SW chapter residents in July 2022 by Pruntha Kanagasundaram and Marisa Ramandt
- 9 Career Corner: Inspiration and the Future of Pharmacy Practice: Advice for Students and New Grads | a summary of her presentation on career development by Cheyenne Matinnia
- 12 Volunteer Opportunities | Looking for a way to get involved or build new skills? Check out our website!

Click on any title text to hyperlink directly to article

- 13 CSHP OB Journal Club | Recent Presentations
- **14 CSHP National Annual General Meeting notice** | Sunday October 30th, in person and virtual
- 15 CSHP Ontario Branch Education Conference | brought to us by the CSHP Ontario Branch Education Committee save the date for Educational Conference and Awards Ceremony Saturday November 19th!

# PRESIDENT ADDRESS

SHP-OB's strong volunteer base of Council members, pharmacists, technicians and students are providing more value from member services, education, and advocacy. Here are just a few highlights of what our amazing Council has been working on these past few months:

#### **Events**

Across the province, the Chairs have organized 3 residency nights, 4 education sessions, and 4 journal clubs. Recordings of the virtual journal club and education events can be found online if you missed them.

#### **Mentorship Program**

The Membership Committee launched our mentorship program within our Branch membership. After an amazing event to kickoff the mentorship year, our mentors and mentees are taking the lead on showing us how to improve the connectiveness amongst our members. What an amazing way to support and learn from each other.

#### Fall Education conference

Planning is underway for our first in-person event in 2 years! We are looking forward to welcoming everyone back for an in-person Fall Education Conference & Awards Night this year on Saturday, November 19th at the Leslie Dan Faculty of Pharmacy, University of Toronto. Program and registration details can be found here.

#### **Advocacy**

Across the province, pharmacy departments are feeling the pressures of staffing shortages. The presidential officers have met with the Ontario Hospitals Association in early September to highlight the

substantial gap in our pharmacy professional's workforce - both technicians and pharmacists - and discuss opportunities for joint advocacy on this front.

### Comprehensive Medication Record for Ontarians Project

CSHP-OB has been invited to participate on a new Ontario Health project to improve the Digital Health Drug Repository (DHDR). Thank you to Sunil Patel and Gunther Ha who have kindly volunteered to represent CSHP-OB on this important initiative! We look forward to hearing the updates at the Fall Meeting

I am in the last quarter of my presidential year and it has been a whirlwind. THANK YOU for your ongoing commitment to the work of OB Council! It is a tough time to be in health care right now and we appreciate how dedicated this team has been to the mission of the Branch.

I'll put in a quick plug that we will have some opportunities in the Fall as people finish up their terms. If you know anyone who is interested in volunteering on Council, please reach out to Anne Stacey astacey@cshp.ca or myself obpresident@cshp.ca.

#### Rita Dhami

CSHP OB President 2021-22 obpresident@cshp.ca

JUST A FEW
Highlights

# **PRESIDENT ADDRESS...** continued Note from the outgoing editor

s my term as Co-Chair of the OB Communications Committee, and the editor for the HPO ends in November and this will be the last issue that I organize, I would like to say a big thank you to everyone I've had the pleasure to work with on articles over the past 2.5 years. HPO is a unique venue to share experiences and achievements of members across the branch, and it isn't possible without the contributions from people who are excited to share their practice insights, who plan events or advocate for our professional voices.

Thank you to all of the volunteers from the OB that I've gotten to know in this role. Your passion for the profession, your commitment and dedication are inspiring. I encourage CSHP OB members to volunteer for a committee or with your chapter - it's a rewarding

way to have renewed professional inspiration, have insight into advocacy efforts, participate in continuing education events, and collaborate with amazing people.

Victor Lam, my Co-Chair, the Communications Committee members, and the incoming Co-Chair (TBD) will continue to co-ordinate the quarterly HPO issues, as well as all the work on the social media accounts. If you are looking for updates, invitations, or great conversation, check out OB on Twitter (@CSHP\_OB), Instagram (@cshp\_ob) or Facebook (CSHP OB), and soon to be coming to LinkedIn!

One change you may notice with this issue is the introduction of new sponsors and their advertisements. HPO has always been possible due to sponsorship, and we are grateful for their support to share important Branch information to our members. Going forward, HPO will also include advertisements from eligible sponsorship partners. Articles from sponsors will be clearly identified, and include content provided by the sponsor that is informative for OB members. Sponsor advertising does not influence editorial decisions or content in the HPO. CSHP OB does not endorse or evaluate the advertised products, services, or companies, nor any of the claims made by the advertisements.

It's been so fun to work behind the scenes on HPO. I'll still be volunteering with OB, just in a different capacity, and hope to get to know many more OB members and volunteers in the coming months!

Watch out: Coming soon to LinkedIn.







#### **Authors**

(Primary)

#### Pruntha Kanagasundaram

(Student Liaison - University of Waterloo)

(Secondary)

#### Marisa Ramandt

(Southwestern Chapter Co-Chair)

fter two years of hosting virtually due to the pandemic, the Southwestern & Golden Horseshoe Chapters' Residency Research Night successfully returned to an in-person showcase on July 13th, 2022. The University of Waterloo School of Pharmacy hosted this

event for the first time, which was well received by both pharmacists and students alike. This annual evening offers an opportunity for our residents to share their research projects with a wider audience, while strengthening their writing and oral presentation skills.

Congratulations to the thirteen pharmacy residents who showcased the results of their research projects to the pharmacists, pharmacy students and professors in attendance. The research projects covered a wide variety of topics, offering something for everyone. Following an in-person poster session, attendees enjoyed dinner

and hybrid in-person and virtual oral presentations. The night concluded with the announcement of the three winning research projects. We would like to thank the residents, sponsor (Fresenius Kabi), evaluators, and the organizing committee for all of their contributions in making Residency Research Night a success. Also, thank you to the audience members who joined us both in person and virtually to support the residents.

We had a chance to interview the residents of the winning research projects, who gave us some insight into their research projects.





#### First Place Winner:



#### Rebecca Druken

London Health Sciences Centre

**Project:** Use of a Two Bag Fluid Administration Protocol in the Treatment of Paediatric Diabetic Ketoacidosis: A Retrospective Review I. What are the key findings from your research project?

My study was able to demonstrate that the new two bag IV fluid protocol implemented at the Children's Hospital at London Health Sciences Centre (CHLHSC) continues to provide safe and effective treatment for paediatric diabetic ketoacidosis (DKA) in comparison with the one bag protocol used previously. Our simplified two bag protocol may also result in decreased resource utilization, as it allows for standardization of IV bags and prevents wastage of partially used bags.

2. What impact does your research have on future practice?

Our hope is that as a result of this project supporting our two bag protocol, surrounding hospitals might implement the new protocol as well to unify the treatment received in our region. Almost half of the paediatric DKA patients who present to CHLHSC are transferred from a referring hospital and if these centres used the same protocol, it could result in better continuity of care upon transfer and potential resource savings for those hospitals as well.

3. What is something you learned through conducting your own research?

I learned a lot about DKA in the paediatric population while conducting this project, as my education had previously focused more on prevention of DKA than treatment. I now understand many of the key principles of DKA and nuances of treatment, which I have been able to tie into my clinical rotations when managing paediatric DKA cases.

#### **Second Place Winner:**



**Emily VanderWindt**St. Joseph's Healthcare Hamilton

**Project:** Evaluating
Discontinuation of Gastric Acid
Suppressants During and After
Discharge from Intensive Care:
A Retrospective Chart Review

I. What are the key findings from your research project?

Of all patients who received a gastric acid suppressant (PPI or H2RA) during their ICU stay, only 35% had this medication stopped at ICU discharge. Patients were more likely to have this medication stopped if they were not on a PPI or H2RA prior to admission and if the PPI or H2RA was ordered from the ICU Admission Order Set.

# 2. What impact does your research have on future practice?

This research project showed that PPIs are commonly prescribed in the ICU and continued after ICU discharge. In order to reduce potentially unnecessary PPI use, prescribers and pharmacists should ensure there is an appropriate indication for home PPIs. Using the ICU Admission Order Set to order PPIs for stress ulcer prophylaxis may also reduce continuation of PPIs after an ICU stay.

# 3. What is something you learned through conducting your own research?

I did not have a lot of research experience before this project, so I appreciated gaining experience in the research process: writing a proposal, submitting for ethics approval, designing a data collection tool, extracting data, and analyzing and summarizing the results. I am grateful for my research team, as I also learned how valuable a strong team is to the success of a research project.



Planning Committee (from left to right: Andrea Wist, Marisa Ramandt, Barb Coulston, Megan Hannath)

#### Third Place Winner:



### Teagan Rolf von den Baumen

London Health Sciences Centre

**Project:** Attaining Therapeutic Vancomycin Levels in Neonates: Comparing Initial Dosing Protocols at Children's Hospital, London Health Sciences Centre I. What are the key findings from your research project?

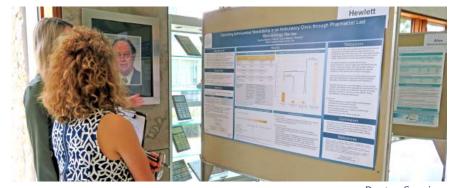
My project explored the impact of a change in NICU vancomycin dosing guidelines on the proportion of neonates that achieved therapeutic vancomycin trough concentrations (10-20 mg/mL). We found that incorporating post-natal and postmenstrual age into our dosing guideline significantly increased the proportion of neonates that achieved target trough concentrations, without significant changes in 30-day all-cause mortality, days of vancomycin therapy, or incidence of nephrotoxicity (although data was limited for this safety outcome). No other demographic variables collected appeared to be significantly associated with achieving target trough concentrations.

# 2. What impact does your research have on future practice?

My team's research adds to the existing literature that post-natal and post-menstrual age are relevant parameters to include in neonatal vancomycin dosing guidelines. While our project did not find any differences in efficacy or safety outcomes, clinicians wishing to target vancomycin concentrations of 10-20 mg/mL may consider incorporating these parameters.

# 3. What is something you learned through conducting your own research?

A valuable tool throughout completing my project was receiving feedback from other pharmacists and team members of diverse backgrounds. I learned that seeking feedback at different stages, from protocol development to writing the manuscript, can help strengthen the overall project.



Poster Session



#### 2021-2022 Residency Research Projects:

Thank you to the following residents who also presented their research projects. We all appreciated learning from you!

#### Reem Abaza

London Health Sciences Centre

**Project:** An Analysis of Imipenem-Cilastatin Usage and the Potential for Carbapenem De-Escalation at London Health Sciences Centre

#### **Alex Dipierdomenico**

Windsor Regional Hospital

**Project:** A Retrospective Analysis of Thrombo-Prophylaxis in Hospitalized Patients with Cancer

#### Kendra Hewlett

Windsor Regional Hospital

**Project:** Optimizing Antimicrobial Stewardship in an Ambulatory Clinic through Pharmacist Led Microbiology Review

#### Jace Hui

Hamilton Health Sciences

**Project:** Impostor Phenomenon During and After Residency: A National Survey

#### Laura Morrison

The Centre for Family Medicine Family Health Team, University of Waterloo

**Project:** Quality of Community Warfarin Management in Canada: A Cross Sectional Observational Study

#### **Madeline Pugi**

St. Joseph's Healthcare Hamilton

**Project:** Development of Eosinophilia in COVID-19 Patients: A Retrospective Chart Review

#### **Sarah Tessier**

London Health Sciences Centre

**Project:** Expanding Hospital Pharmacists' Scope of Practice Survey

#### Sally Thai

Hamilton Health Sciences

**Project:** Combination Antibiotic Therapy for Persistent Staphylococcus aureus Bacteremia: A Retrospective Analysis

#### Alena Tran

Hamilton Health Sciences

**Project:** Duration of Vancomycin Therapy in Neonatal Coagulase-Negative Staphylococcus Bacteremia: A Retrospective Observational Study

#### Catherine Zhu

London Health Sciences Centre

**Project:** The Effect of Trimethoprim-Sulfamethoxazole Dosing Schedule on High-dose Methotrexate Pharmacokinetics in Pediatric Acute Lymphoblastic Leukemia Patients

# **INSPIRATION AND THE FUTURE OF PHARMACY PRACTICE:** Cheyenne Matinnia

# Advice for Students and New Grads

n April 2022, I delivered a presentation at the Ontario Pharmacy Student Integrative Summit (OPSIS). I was given a blank slate for the presentation subject matter, but was asked that the presentation inspire students about the future of hospital pharmacy. In that moment I had a flashback to my own mindset when I was a student: interested and curious about hospital practice, unsure of what to expect, and unsure about the future. and scope of hospital pharmacy

After completing my PharmD, residency training, and starting work as a clinical pharmacist, I've had the privilege to work with colleagues that positively represent

practice.

our profession and contribute to the growth of our scope in hospital practice. I am inspired by their advocacy and how they use our knowledge as pharmacists to improve patient care. They have inspired my own aspirations for advocacy and education in pharmacy practice; their hard work and initiatives have expanded our practice to where it is today. Looking at what they've accomplished so far, and the potential for what our generation can do by carrying that torch, was my inspiration when crafting this presentation.

I found the best way to show the accomplishments of our profession to newer students was to look at our past, present, and future. I discussed the history and growth of

hospital pharmacy practice, outlined modern-day hospital pharmacy in Canada and how to measure impact, and reviewed opportunities to contribute to hospital pharmacy growth. I also shared some personal take-aways from my own journey thus far in pharmacy.

#### Dr. Cheyenne Matinnia,

HBSc. PharmD, ACPR, RPh Clinical Pharmacist. Paediatric Medicine & Respirology, Cardiology, The Hospital for Sick Children Education Committee Co-chair. Ontario Branch - Canadian Society of Hospital Pharmacists

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Twitter: @cmatinnia

LinkedIn: http://linkedin.com/in/

Instagram: @AskAPharmacyResident





# INSPIRATION AND THE FUTURE OF PHARMACY PRACTICE... continued

Here are my personal take-aways for students and new practitioners (from a new practitioner)!

### I. Be an advocate for the pharmacy profession

In today's age, being an advocate for pharmacy is an unwritten part of our job. We are championing the pharmacy profession and bringing awareness to our practice; this spreads and demonstrates the impact of our profession on patient care, which can lead to growth and expansion of our roles! We share and spread knowledge about our profession and scope all the time; from family gatherings to the patients we care for at work. Finding your own way of explaining what we do is so important, as it helps spread awareness of the positive impact we can have on healthcare! Advocacy can also mean advocating for better use

of pharmacist skill-sets (such as expanded scope). Most importantly, this effort is all in the name of using our skills to improve patient care. You can start to advocate by getting involved in pharmacy groups, committees, or other opportunities to help you learn more about our profession and impact. Take advantage of daily opportunities to spread awareness of our role (don't underestimate the impact of the informal conversations you have with friends or the interprofessional healthcare team!).

### 2, Understand the importance of metrics

Metrics demonstrate impact and outcomes. Metrics are especially important in our profession since they can be used to demonstrate how we positively impact patient care with evidence and data. Pharmacy metrics spread awareness

of our impact, and can lead to growth by supporting business plans/proposals. Take some time to learn how we currently measure metrics in the pharmacy profession (there are many different ways, each with different pros/cons). Learn how your site measures pharmacy metrics since many sites use different methods. It's also interesting to learn up on past/present initiatives to standardize pharmacy metrics and why we want to collect them. I'd





# INSPIRATION AND THE FUTURE OF PHARMACY PRACTICE... continued

recommend looking into cpKPIs – also known as clinical pharmacy key performance indicators.

#### 3, Find a good mentor

Look for a member of our profession that you look up to, that you feel comfortable going to for guidance, and who is invested in your growth. Mentors are an essential support, and it's a privilege to learn from their experience. They can also help keep you motivated and refreshed, give you new ideas, and help give you constructive feedback! Mentorship is definitely a lot of work, and I am so grateful to my past and present mentors for their time. I now try to pay their kindness forward by doing the same for others. When looking for a mentor, take your time. Network around and look for people who share similar interests, are invested in your growth, and who you look up to professionally.

### 4, Identify what motivates you about pharmacy

Finding your own personal motivation in the pharmacy profession will help you with what steps you take in your career! It will help you when you're making your next career move, when you feel motivated, when you don't feel motivated. Remember, you don't have to mold your journey after others, and remember that everyone's journey has its own share of ups and downs (no journey is perfectly linear). Take time to find your interest and strengths both in and out of our profession, and find ways of incorporating that in your work! You can also look at the pharmacy journey of people around you and ask them about it (if they're comfortable to share).

"NO JOURNEY IS PERFECTLY LINEAR" I am excited as a newer member of our profession for what our future holds. I hope my take-aways inspire you as much as they have inspired me! They are points I've taken from my own journey thus far in our profession, and I'm looking forward to continuing to learn about how I can contribute to the future of our profession.



# We need you!

Check out our website for opportunities to volunteer with the Ontario Branch at the local chapter level or on a committee

- Membership Committee Co-chair, and members
- OHPMS Committee Co-chair
- Communications Committee Co-chair
- Awards Committee members

# ONTARIO BRANCH JOURNAL CLUB

ne CSHP OB Journal Club presentations are recorded and available to all CSHP members online. Journal club presentations are uploaded to the CSHP Webinar website for later viewing (member login required).

We hope to see you at an upcoming session Watch your inbox or social media for registration details.

If you are interested in presenting at an upcoming Journal Club, please contact vivian.kt.lee@gmail.com. No experience is required! It's a great learning opportunity for everyone.

#### **Recent Ontario Branch Journal Club sessions**

(member login required):

September Strong Enough to Change the Tide? A Critical Appraisal of the Efficacy and Safety of 2.0mg Weekly Semaglutide (SUSTAIN FORTE)

Presenter: Laura Morrison, BScPharm, Clinical Pharmacist, Two Rivers Family Health Team

August Non-Inferiority Complex? A Critical Appraisal Tutorial of Non-Inferiority Trial Design

Presenter: Andrea Beaman, PharmD, BScPharm, DUE Pharmacist, Trillium Health Partners

July Balancing the Risks and Benefits of Antimicrobial Prophylaxis after Orthopedic Surgery: A Critical Appraisal of Current Literature

Presenter: Shreeya Thakrar, PharmD, Pharmacy Resident, Sunnybrook Health Sciences Centre

May Is the "syringe pull-back" method pulling us away from compounding best practices? An illuminating study of chemotherapy compounding at 5 U.S. hospitals

Presenter: Vivian Lee, BScPhm, Drug Information Pharmacist, The Ottawa Hospital / Ottawa Valley Regional Drug Information Service (OVRDIS)

# **LATEST NEWS**



### Notice of the 2022 AGM and Special Resolutions

#### **NOTICE OF MEETING**

The Annual General Meeting of the Canadian Society of Hospital Pharmacists will be held on Sunday, October 30 from 1:30-2:30 pm EDT in-person at the Sheraton Four Points Hotel in Gatineau, Quebec and virtually via zoom.

#### Attending in person?

We'll register you at the door.

#### Attending virtually via Zoom?

#### Register for zoom here

A meeting link will be sent closer to the AGM date along with your status (member, supporter, observer) and any background documents will be accessible prior to this date.

14

ADMIT ONE

# CSHP ONTARIO BRANCH

# 74TH ANNUAL CONFERENCE

When: Saturday, November 19th from

8:00am - 5:00pm

Where: Toronto (yes, in person!)

The 74th Annual CSHP Ontario Branch Education Conference will take place this fall on Saturday, November 19th, followed by our Awards Night.

The Annual Conference will be held at the Leslie Dan Faculty of Pharmacy at the University of Toronto.

The Education Committee members are striving to bring you exciting educational sessions and valuable workshops. Registration is open and draft conference schedule available.

Click here to register

Cheyenne Matinnia and Ariane Blanc

Co-Chairs, CSHP Ontario Branch Education Committee

Canadian Society of Hospital Pharmacists



15

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HOSPITAL PHARMACY IN ONTARIO

# CALL FOR ARTICLES

16

WE'RE LOOKING FOR INTERESTING STORIES
TO PUBLISH FOR THE UPCOMING ISSUES

#### **CLASSIC PAPERS REVISITED**

Anesthesiology 2010; 113:1433-7

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David S. Warner, M.D., Editor

#### Lidocaine: The Origin of a Modern Local Anesthetic

Xylocaine®

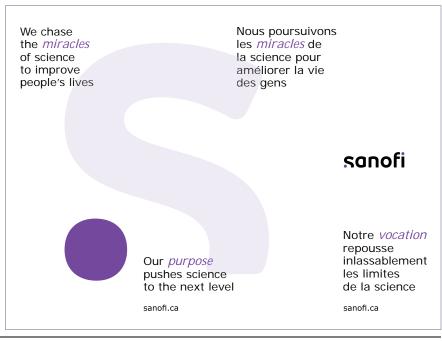


Torsten Gordh, M.D.,\* Torsten E. Gordh, M.D., Ph.D.,† Kjell Lindqvist, M.Sc.‡

Xylocain, a New Local Analgesic. By Torsten Gordh. Anaesthesia 1949; 4:4–9. Abstract used with permission.

Abstract: Before the introduction of lidocaine, the choice of local anesthetics was limited. Procaine was most commonly used and offered less toxicity than cocaine, but it had a short duration of action. Tetracaine had substantial systemic toxicity, limiting its use largely to spinal anesthesia. An agent with low toxicity, a quick onset, and a longer duration of action was needed. This article reports the initial clinical trials with the newly synthesized lidocaine. The first trials were wheal tests on the forearms of human volunteers. Lidocaine anesthesia duration was markedly longer than that produced by procaine. Lidocaine was first tested for infiltration anesthesia in many short procedures performed in the emergency department, followed by major procedures, including those for goiter and hernia in the operating room. Consistent success was observed in both environments. Lidocaine was then tested for conduction anesthesia using brachial plexus and mandibular, sacral, and

paravertebral blocks. Its onset was again substantially faster and longer lasting than that of procaine. Lidocaine also provided good spinal and surface anesthesia of the cornea.



<sup>\*</sup> Professor Emeritus, Department of Anesthesiology, Karolinska Hospital, Stockholm, Sweden. † Adjunct Professor, Department of Surgical Sciences/Anesthesiology and Intensive Care Medicine, Uppsala University Hospital, Uppsala, Sweden. ‡ Ta¨by, Sweden

# Canadian Society of Hospital Pharmacists



#### HOSPITAL PHARMACY IN ONTARIO

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