2018 CSHP National Awards Program Winners
Programme national des prix 2018 de la SCPH : lauréats et lauréates

The winner of the **Distinguished Service Award** (sponsored by Johnson & Johnson, Family of Companies) is **Mary H H Ensom** (Vancouver, BC).

The winner of the **Isabel E. Stauffer Meritorious Service Award** (sponsored by Fresenius Kabi Canada Ltd.) is **Theresa A Hurley** (Halifax, NS).

The winner of the **Hospital Pharmacy Student Award** (co-sponsored by the Canadian Society of Hospital Pharmacists [CSHP] and the Canadian Association of Pharmacy Students and Interns [CAPSI]) is **Maria P Moreno** (Brampton, ON).

Note: The **New Hospital Pharmacy Practitioner Award** was not awarded in 2018.

Management and Leadership Best Practice Award
Sponsored by **Apotex Inc.**
Health Authority Pharmacists' Perceptions of Independent Pharmacist Prescribing (completed at Lower Mainland Pharmacy Services)
Mitch Prasad, Peter Loewen, Stephen Shalansky, Arden Barry

Patient Care Enhancement Award
Sponsored by **Teva Canada Limited**
A Cohort Study to Identify Risk Factors for Drug-Related Emergency Department Visits in Older Adults (completed at Nova Scotia Health Authority and Dalhousie University)
Shanna Trenaman

Pharmacotherapy Best Practices Award
Sponsored by **Pfizer Canada Inc.**
Point-of-Care Beta-lactam Allergy Skin Testing by Anti-microbial Stewardship Programs: A Pragmatic Multicenter Prospective Evaluation (completed at Sunnybrook Health Sciences Centre)
Lesley Palmay, Tiffany Kan

Safe Medication Practices Award
Sponsored by **Health*PRO* Procurement Services Inc.**
Vancomycin Trough Concentrations and Outcomes in Non-deep Seated Infections: A Retrospective Cohort Study (completed at Sunnybrook Health Sciences Centre)
Michael Wan, Sandra A N Walker, Marion Elligsen, Lesley Palmay

Teaching, Learning and Education Award
Sponsored by **Pfizer Canada Inc.**
Optimizing Patient Education of Oncology Medications: A Patient Perspective (completed at Victoria General Hospital)
Tessa Lambourne, Laura V Minard

The award-winning abstracts are published exactly as submitted by the authors and have not undergone any copyediting by the Canadian Journal of Hospital Pharmacy.

Le Journal canadien de la pharmacie hospitalière *n'a pas soumis les résumés primés à une révision linguistique et les publie ici tels que remis par les auteurs.*

Health Authority Pharmacists' Perceptions of Independent Pharmacist Prescribing

Management and Leadership Best Practice Award, sponsored by Apotex Inc.

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Background: The role of the pharmacist has evolved to include independent prescribing in some jurisdictions. To date, there has been no formal assessment of health authority-based pharmacists' perceptions of independent pharmacist prescribing (IPP) in British Columbia (BC).

Objectives: To assess health authority-based pharmacists' attitudes, beliefs, and perceptions of IPP, how it might affect their practice, and perceived barriers and enablers to incorporating IPP into their practice.

Methods: This was a cross-sectional evaluation of health authority-based pharmacists that utilized a prospective, anonymous online survey. All pharmacists employed by Lower Mainland Pharmacy Services in BC, Canada were invited via email to participate. A multivariate regression analysis was performed to identify factors associated with IPP.

Results: Two hundred and sixty-six pharmacists (39%) responded. Pharmacists agreed IPP is important to the profession, relevant to their practice, and may enhance job satisfaction. As well, many respondents felt that they have the expertise to prescribe. Activities identified where IPP could positively affect behaviour include deprescribing, prescribing on discharge or transfer, and renewing medications. Enablers to applying for IPP included perceived impact on patient care and the profession, level of support from management and coworkers, and personal ability. Most pharmacists indicated they would be likely to apply for IPP if this authority were to be granted. Those with <10 years of experience or a clinical practice or research role were significantly more likely to apply for IPP.

Conclusions: Heath authority-based pharmacists believed IPP is relevant and of significance to the profession, and that it would aid in various aspects of their practice to maintain patient safety and improve patient outcomes. There were no perceived barriers identified to applying for or incorporating IPP into their practice. Most respondents stated they are likely to apply for IPP if it is granted in BC.

Keywords: pharmacists, drug prescriptions, delivery of health care, hospital pharmacy service

A Cohort Study to Identify Risk Factors for Drug-Related Emergency Department Visits in Older Adults

Patient Care Enhancement Award, sponsored by Teva Canada Limited

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Background: Polypharmacy and inappropriate medications increase the risk of drug-related emergency department (ED) visits. Prior research has focused on the number of medications used or specific problematic medications.

Objective: The goal of the present study was to examine the medication appropriateness index (MAI), specific medications, medical, social and economic factors as predictors of drug-related ED visits in older adults.

Methods: The retrospective cohort study included subjects 65 years of age or older who were assessed by geriatric medicine in the ED at a tertiary care center. ED visits were assessed on both Hepler and Strand and Naranjo criteria for drug-related events. Risk factors for drug-related ED visits in older adults were assessed using backward stepwise multivariate logistic regression. Potential risk factors included information from each subject's comprehensive geriatric assessment and included medical history, medication use, MAI, function, cognition, demographics, frailty and social supports.

Results: Of 201 patients, 53.2% were women. Mean age was 81.1±8.1 years. Patients took an average of 9.0±5.6 medications. There were 40 drug-related ED visits based on the Hepler and Strand criteria and only seven events were deemed drug-related using the Naranjo criteria. The mean MAI was 12.5±13.0. Logistic regression based on Hepler and Strand definition of a drug-related event identified narcotic use (p=0.035), any anticholinergic drug use (p=0.042) and the absence of social supports (p=0.013) as being statistically significant risk factors for a drug-related ED visits. Logistic regression based on Naranjo score identified MAI as being a statistically significant risk factor (p=0.007).

Conclusions: Avoidance of anticholinergic medications, narcotics and inappropriate medications as well as the presence of adequate social support are important in the prevention of drug-related ED visits in older adults.

Point-of-Care Beta-lactam Allergy Skin Testing by Antimicrobial Stewardship Programs: A Pragmatic Multicenter Prospective Evaluation

Pharmacotherapy Best Practices Award, sponsored by Pfizer Canada Inc.

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Background: Beta-lactam allergy skin testing (BLAST) is recommended by antimicrobial stewardship program (ASP) guidelines, yet few studies have systematically evaluated its impact when delivered at point-of-care.

Objectives: to determine the feasibility of implementing a pharmacist-led beta-lactam allergy skin testing service to optimize first-line beta-lactam therapy for the treatment of clinically-documented infections

Methods: s multicenter prospective evaluation of the use of point-of-care beta-lactam allergy BLAST by Infectious Diseases (ID) and ASP pharmacists at three hospital sites in Toronto, Ontario (Sunnybrook Health Sciences Centre, North York General Hospital and Michael Garron Hospital) over a 15 month period. Patients with a reported beta-lactam allergy were identified by the ASPs through their routine audit-and-feedback programs or by the ID consultation service. During both the baseline and intervention periods, patients receiving alternate second-line therapy because of an allergy history were assessed and switched to preferred beta-lactam therapy, when it was deemed that the benefit outweighed the risk. During the intervention period, bedside BLAST was offered to and performed on eligible patients reporting immediate hypersensitivity reactions that precluded the prescription of a beta-lactam on history alone.

Results: a total of 827 patients were identified with reported penicillin allergies, of whom 76% required beta-lactam therapy. During the baseline period (when BLAST was not offered) only 50% received preferred beta-lactam therapy based on history, which increased to 60% (p= 0.02) during the intervention period. This proportion was further increased to 81% (p< 0.001) upon the provision of BLAST, without any increases in adverse events. BLAST was found to be associated with a 4.5-fold greater odds of receiving preferred beta-lactam therapy (p<0.001).

Conclusions: This project demonstrated the feasibility of trained ID/ASP pharmacists providing inpatient BLAST at the point- of-care to safely increase the use of preferred beta-lactam therapy in patients with reported penicillin allergies.

Keywords: beta-lactam allergy, skin testing, penicillin allergy evaluation, penicillin allergy

Vancomycin Trough Concentrations and Outcomes in Non-deep Seated Infections: A Retrospective Cohort Study

Safe Medication Practices Award, sponsored by HealthPRO Procurement Services Inc.

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Background: Vancomycin guidelines recommend dosing to attain trough concentrations >10mg/L in non-deep seated infections. However, no studies have evaluated the risk of poor clinical or microbiological outcomes associated with vancomycin troughs ≤10mg/L (low) versus >10mg/L (high) when vancomycin is used to treat non-deep seated infections for ≤14 days.

Objective: The primary objective was to evaluate patients with non-deep seated infections treated with vancomycin for ≤14 days to determine whether there were differences in clinical or microbiological outcomes with serum trough concentrations of vancomycin ≤10 mg/L versus >10 mg/L.

Methods: A retrospective cohort study of patients hospitalized between March 10, 2010 and December 31, 2015 who received ≤14 days of vancomycin to treat a non-deep seated infection and had at least one steady state trough concentration was completed. Patient cohort data were compared using appropriate statistical tests (t-test, Fisher's exact, or Mann-Whitney) and binary logistic regression was used to identify factors associated with clinical outcome.

Results: Of 2098 patients screened, 103 (5%) met inclusion criteria. Baseline characteristics between cohorts were not different. Clinical cure was not different between the low (42/48 [88%]) and high trough (48/55 [87%]) cohorts (p>0.99) and vancomycin trough concentration was not associated with clinical outcome (p=0.973). More patients in the high trough group had dosing changes (7/48 [15%] vs. 22/55 [40%], p=0.0046), with approximately three times more dose adjustments per patient (0.17 vs. 0.55, p=0.0193). No signal for increased vancomycin resistance associated with vancomycin troughs was identified.

Conclusions: No difference in clinical or microbiological outcomes based on vancomycin trough concentrations were observed in patients with non-deep seated infections treated with vancomycin for ≤14 days. Targeting higher vancomycin trough concentrations may be associated with increased workload with no corresponding benefit in clinical or microbiological outcomes in these patients.

Keywords: vancomycin; non-deep seated infections; trough concentrations; levels; therapeutic drug monitoring

Optimizing Patient Education of Oncology Medications: A Patient Perspective

Teaching, Learning and Education Award, sponsored by Pfizer Canada Inc.

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Introduction: The provision of oncology medication education is becoming progressively more important due to increasing complexity of cancer treatments, an aging population and improved prognoses. To optimize patient education, it is important to explore the patient perspective, as this is associated with a number of potential benefits. However, reports of oncology patients' dissatisfaction with the amount and type of information provided are being increasingly recognized. The information needs of patients with cancer have been primarily studied using quantitative methods and little qualitative research on this topic exists. It is currently unknown what oncology medication education patients at the Nova Scotia Health Authority (NSHA) wish to receive.

Objective: To explore patients' perspectives of optimal oncology medication education provided to patients at NSHA.

Methods: Adult (≥ 18 years) outpatients in medical oncology and hematology at NSHA were invited to participate in focus groups, which were audio-recorded, transcribed and analyzed thematically.

Results: Three focus groups, including 21 outpatients, were conducted. Four major themes were identified. *Preparing for what lies ahead* consisted of: readiness to receive information, anxiety over the unknown, setting expectations and patients supporting one another. *Bridging the information gaps* was made up of: gap in provision of patient education, gap in continuity of patient education and gap in trustworthy information. *Understanding the education needs of the patients* was comprised of: sources of information, education timing and setting, prioritizing information needs and individuality. *Experience within the health care system* encompassed: interactions with health care professionals, willingness to ask questions, patient satisfaction and financial implications.

Conclusions: This study identified previously unknown patient education needs and also supported ideas reported in the literature. This data will guide the strategies that will be used to optimize the delivery of oncology medication education at our facility and possibly other health care institutions.

Keywords: oncology, medication, education, patient perspective, focus group