PROCEEDINGS OF THE 2024 INTERDISCIPLINARY STUDENT RESEARCH CONFERENCE ON HEALTHCARE (ISRCH)

LES ACTES DE LA 2024 CONFÉRENCE DE RECHERCHE ÉTUDIANTE INTERDISCIPLINAIRE DE LA SANTÉ (CRÉIS)

Sunday April 14th, 2024 | 8:30 AM - 5:00 PM

Roger Guindon Hall (RGN), 451 Smyth Rd, Ottawa, ON

ISRCH/CRÉIS

The Interdisciplinary Student Research Conference on Healthcare is a group of students from varying disciplines who are working together to bring you ISRCH/CREIS: an interdisciplinary, student-led, and innovative research conference. We aim to promote and cultivate an innovative and thriving healthcare system that is anchored in an interdisciplinary community of healthcare providers and researchers. Our vision and mission are based on the pillars of interdisciplinarity: integrating knowledge and methods from different disciplines, using a real synthesis of approaches. This year, our theme is medical/health sciences education, and we have brought in esteemed speakers to exemplify current innovations and breakthroughs in this field. We hope you'll enjoy the conference!

Sincerely,

The 2023-2024 ISRCH exec team

AGENDA / PROGRAMME

Breakfast & registration / Le déjeuner et l'inscription
RGN Atrium 8:00 a.m. - 8:45 a.m.

Opening address / Discours d'ouverture
RGN 2003 8:45 a.m. - 9:00 a.m.

Keynote speaker / Conférenciers principaux
RGN 2003 9:00 a.m. - 10:00 a.m.

Break / Pause 10:00 a.m. - 10:30 a.m.

Oral presentations (block 1) /Présentations orales (bloc 1)
RGN 2003 10:30 a.m. - 12:00 p.m.

Lunch / *Dîner*
RGN Atrium 12:00 p.m. - 12:30 p.m.

Poster presentations / *Présentations affiches*
RGN 2006 12:30 p.m. - 1:30 p.m.

Oral presentations (block 2) / *Présentations orales (bloc 2)*
RGN 2003 1:30 p.m. - 3:00 p.m.

Keynote speaker / *Conférenciers principaux*
RGN 2003 3:00 p.m. - 4:00 p.m.

Closing address & awards ceremony / Discours de clôture et remise des prix
RGN 2003 4:00 p.m. - 4:30 p.m.

Networking / Réseautage
RGN Atrium 4:30 p.m. - 5:00 p.m.

ORAL PRESENTATIONS
Présentations Orales
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10:30-10:40 am

Illness Presenteeism Among Physicians and Medical Trainees: A Scoping Review

Lorenzo Madrazo1, MD, Jade Choo-Foo1, MD, Wenhui Yu1*, BHSc, Kori A. LaDonna1, PhD, Marie-Cécile Domecq1, MBSI, and Susan Humphrey-Murto1, MD, MEd

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Introduction:
Illness presenteeism (IP) is the phenomenon where individuals continue to work despite being sick.1 The practice of IP reflects the culture of invulnerability in medicine and is thus prevalent among physicians and trainees despite negative consequences, which include poor patient safety, depression, decreased work productivity, and burnout.2-3 IP has become more salient as the recent COVID-19 pandemic has heightened our concerns around physician burnout and increased the stakes of transmitting respiratory disease. Thus, we conducted a scoping review to advance how we understand and address this longstanding, yet concerning practice.

Methods:
The Arksey and O'Malley framework was used to systematically select and summarize the literature published between 1997 and 2023. Searches were conducted across four databases. Quantitative and thematic analyses were conducted.

Results:
Of 4,277 articles screened, 45 were included. Of these, 4 were published after the onset of the COVID-19 pandemic. All studies framed IP as problematic for physicians, patients, and healthcare systems. Dominant sociocultural drivers of IP included obligations towards patients and colleagues and avoiding the stigma of appearing vulnerable or even temporarily weak. Structural factors included heavy workload, poor access to health services, and lack of sick leave policies for physicians. The pandemic does not appear to have affected IP-related causes or behaviors. Proposed solutions included both educational interventions and policy-driven changes.

Discussion:
Despite being recognized as problematic, IP remains highly prevalent among physicians and trainees with no observable change through the pandemic. The long-term costs of IP are untenable and seemingly contradicts the profession's efforts to pursue meaningful equity, diversity, and inclusion (EDI)-related work by dismissing those with chronic illnesses and disabilities. IP continues to reinforce an unrealistic professional identity that the physician is invulnerable and "have no personal needs".

Significance or Impact:
To our knowledge, our review is the first to provide a broad overview of the literature related to IP among physicians and physician trainees. As we address EDI concerns in the medical profession, we should examine the practice of IP which can undermine efforts towards wellness and equity. Future work should focus on studying IP through diverse theoretical lenses that can better grasp its complexity and guide the development of nuanced systems-level interventions.

References
1. Homrich PHP, Dantas-Filho FF, Martins LL, Marcon ER. Presenteeism among health care workers: literature review. Rev Bras Med Trab. 2020;18(1):97-102. doi:10.5327/Z1679443520200478
2. Webster RK, Liu R, Karimullina K, Hall I, Amlôt R, Rubin GJ. A systematic review of infectious illness Presenteeism: prevalence, reasons and risk factors. BMC Public Health. 2019;19(1):799. doi:10.1186/s12889-019-7138-x
3. Morishita M, Iida J, Nishigori H. Doctors' experience of becoming patients and its influence on their medical practice: A literature review. Explore N Y N. 2020;16(3):145-151. doi:10.1016/j.explore.2019.10.007

10:40-10:50 am

Identifying the Short-Term Neurobiological effects of Contrave ® Anti-Obesity Drug

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Introduction:
Obesity is defined as a body mass index (BMI) of >30kg/m2 with abnormal accumulations of adipose tissue and increased risk for comorbidities like cardiovascular disease, diabetes, fatty liver disease, and more1. Obesity has now reached epidemic proportions and is on the rise1. Lifestyle modification is the first-line treatment option for obesity; however, it has been demonstrated to be relatively ineffective in the long-term, prompting pharmacological interventions2. Contrave® is an anti-obesity drug, that has been found to reduce food intake and increase weight loss in human clinical trials. Despite having been on the market for almost 10 years, the neural effects of Contrave® remain largely unknown.

Objectives:
To assess the neural effects of Contrave®, we have designed a parallel, double-blind, placebo-controlled randomized clinical trial wherein participants will undergo baseline and post-intervention functional magnetic resonance imaging (fMRI) scans during a food-cue task. This will allow us to explore if Contrave® alters brain activity in areas related to cognitive control and reward, which are known to be dysregulated in people with obesity3. We will also explore whether these neural profiles are associated with intervention outcomes (i.e., changes in weight, BMI, and waist circumference.)

Methods:
Forty participants with obesity will be recruited from a local weight management clinic and will be randomized to either the Contrave® or placebo group. Participants will undergo an fMRI scan before receiving their respective treatment (baseline) and at 4-5-weeks post-treatment. The fMRI sessions will include a food-cue event related task to assess brain reactivity to food cues, where participants will indicate to what extent they desire a high calorie food, low calorie food, or neutral non-food control item. Our regions of interest will be brain structures and networks previously known to be altered in obesity, such as the dorsolateral prefrontal cortex (dlPFC), which is involved in cognitive control, and midbrain areas which integrate food-intake and reward3. Intervention outcomes will also be assessed in both groups by measuring body weight, BMI, and waist circumference.

Expected Results:
We expect to see “neural signatures” of obesity at baseline, such as increased reactivity in midbrain areas that process reward and decreased activity in areas involved with cognitive control, like the dlPFC3. It is also expected that the Contrave®-receiving group will have greater decreases in body weight, waist circumference, and BMI. It is feasible that changes in these weight measures might correlate with changes in activity in the specified brain regions/networks.

Significance:
The short-term effects of Contrave® on brain function will be elucidated and will, in turn, improve obesity-related patient care and the clinical use of Contrave®.

References
1. Mitchell et al. Psychiatr Clin North Am. (2011) 2Hall et al. Med Clin North Am (2018) 3Farr et al. Metabolism. (2016)

10:50-11:00 am

Investigating The impact of Aging on Balance, and Gait During Dual-task Timed Up and Go Tests

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2 Bruyère Research Institute, Ottawa, Canada.
3 Faculty of Health Sciences, School of Rehabilitation Sciences, University of Ottawa, Ottawa, Canada.

Introduction:
Falls constitute a major cause of injury and may cause disability and death among older adults1. Dual tasking is integral to daily activities, and requires coordination, cognitive and physical functions, which often decline with age. Aging also impacts gait and balance, further hindering dual task performance leading to a fall risk2, therefore, it is crucial to identify those at risk. No previous studies have investigated the impact of aging on the relationship between balance and gait under dual tasking conditions.

Objectives:
Our objective is to correlate the area of the ellipse created by the body's center of pressure during quiet stance while standing with performance on the Timed Up and Go (TUG)3 test under varying dual tasking conditions. We will compare results between samples of younger and older adults on metrics including velocity, step length, and step width. Our goal is to understand aging's impact on balance, gait, and dual tasking.

Methods:
This cross-sectional study is recruiting 15 younger adults (aged 18-29) and 15 older adults (aged 65-85). Participants will complete a balance assessment by standing on a force plate. The TUG will assess standing up, walking, turning and sitting down and can be done under single-task, dual-manual and dual-cognitive conditions. Correlation analysis will be done using metrics for balance, TUG time, and spatiotemporal gait parameters.

Expected results:
Quantitative data collection for this study is ongoing, We anticipate that adding cognitive or manual tasks will increase the time to perform the TUG in both younger and older adults, with a stronger effect in the older adult group. Poorer balance is expected to amplify this effect.

Significance:
Results from this research could inform larger studies and provide initial recommendations for fall prevention for older adults. This pilot study contributes to understand the effects of aging on balance and gait during dual tasking.

References:
1. Public Health Agency of Canada, Seniors' Falls in Canada, 2014.
2. Shukuratova et al. Archives of Physical Medicine and Rehabilitation, 2004.
3. Podsiadlo, D. et al, Journal of the American Geriatric Society, 1991.

11:00-11:10 am

Implementation of a Delayed Cord Clamping Policy for Preterm Infants: a Quality Improvement Study

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3 Maternal Fetal Medicine, The Ottawa Hospital, Ottawa, Canada

Introduction:
The World Health Organisation, Society of Obstetricians and Gynecologists of Canada and Canadian Pediatric Society endorse delayed cord clamping (DCC) of at least 60 seconds for preterm infants to reduce mortality and morbidity.1,2 A revised DCC standard operating procedure (SOP) was approved at The Ottawa Hospital (TOH) in April 2023 regarding specific guidelines for DCC utilization for newborns delivered at a gestational age (GA) of ≤34+0 weeks. This study aims to determine the effect of this SOP on health outcomes for preterm babies and measure the rate of DCC in this patient population after implementing educational resources for staff concerning DCC recommendations.

Methods:
DCC rates were calculated by performing chart audits of preterm deliveries before (April-June 2023) and after (Sept 2023-January 2024) the educational period (July-August 2023). Education was disseminated under multiple formats (e.g., simulation video, presentation at Grand Rounds, etc.). DCC occurred if it was ≥60 seconds. DCC rates were calculated every two weeks.

Results:
Before delivery teams were informed of the new DCC policy and its methodology for preterm infants, the percentage median (or center line, CL) of accomplished DCC per sample was 63.34%. There were no runs below or above the CL during this time (Fig. 1A). After the educational period, the CL decreased to 56.93% and 2 positive and 2 negative runs were observed during this time (Fig. 1B).

Discussion:
The sample size did not seem to affect the percentage of DCC completed, nor contribute to the extreme point values, whether it be before or after the education period. The number of runs increased after DCC education was provided, both positive and negative. DCC rates have further polarized without an increase in overall rate. Further study of causative agents is planned.

Significance:
By implementing a variety of educational methods (didactic learning, visual/auditory learning, and clinical practice reminders), we are maximizing the systematic education of members of the delivery team. Our run charts recognize the gaps in the execution of our DCC educational plan. Our study provides many educational tools and highlights pitfalls in quality improvement studies that should be considered in future projects to maximize positive health outcomes.

References:
1. Jasani B, Torgalkar R, Ye XY, Syed S, Shah PS. Association of umbilical cord management strategies with outcomes of preterm infants: a systematic review and network meta-analysis. JAMA Pediatr 2021 Apr 1;175(4):e210102
2. Guideline No. 424: umbilical cord management in preterm and term infants. J Obstet Gynaecol Can 2022;44(3):313-322

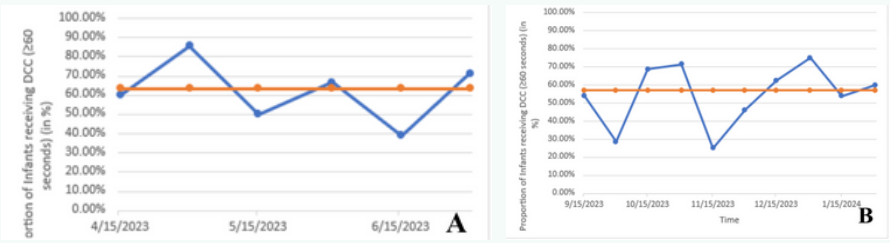

Figure 1: DCC for infants ≤34+0 weeks GA at TOH [General] before (A) and after (B) education.
= Proportion of DCC; = CL

11:10-11:20 am

How Well do ED Physicians Comply with the CAEP Acute Atrial Fibrillation Checklist for Stroke Prevention and Disposition

Samara Adler, MD 1, Amanda Mattice, MD 1, Debra Eagles, MD, MSc 1, Krishan Yadav, MD, MSc 1, Sean Hui, BScN 2, Althaf Azward, BSc 2, Nikesh Pandey, BSc 2*, Ian Stiell, MD, MSc 1

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2 Faculty of Medicine, University of Ottawa

Introduction:
Acute atrial fibrillation/flutter (Acute AF/AFL) is a common emergency department (ED) presentation, with most patients being managed in the ED and discharged home. In 2021, an updated version of CAEP's Acute AF/AFL Best Practices Checklist was published, seeking to guide management.1 We assessed the compliance and safety of application of the Checklist, regarding stroke prevention and disposition.

Methods:
This health records review included adults presenting to two tertiary care academic EDs between January and August 2022 with a diagnosis of acute AF/AFL. Patients were excluded if their initial heart rate was <100 or if they were hospitalized. Data extracted included: demographics, CHADS-65 score, clinical characteristics, ED treatment and disposition, and outpatient prescriptions and referrals. Our primary outcome was the proportion of patient encounters with one or more identified safety issues. Each case was assessed according to seven predetermined criteria from elements of the CAEP Checklist and either deemed "safe" or to contain one or more safety issues. We used descriptive statistics with 95% confidence intervals.

Results:
358 patients met inclusion criteria. The mean age was 66.9 years, 59.2% were male and 77.4% patients had at least one of the CHADS-65 criteria. 169 (47.2%) were not already on anticoagulation and 99 (27.6%) were discharged home with a new prescription for anticoagulation. The primary outcome was identified in 6.4% (95% CI 4.3-9.5) of encounters, representing 28 safety issues in 23 individuals. The safety concerns included: failure to prescribe anticoagulation when indicated (n=6), inappropriate dosing of a direct oral anticoagulant (DOAC) (n=2), inappropriate prescription of rate or rhythm control medication (n=9), and failure to recommend appropriately timed follow-up for new rate control medication (n=11).

Discussion:
There was a high level of compliance with CAEP's Best Practices Checklist regarding disposition and stroke prevention. There are opportunities to further improve care with respect to recommendation of anticoagulation and reducing inappropriate prescriptions of rate or rhythm medications.

Significance:
Our improved understanding of the areas where checklist deviation is most common can guide future research and initiatives to improve these aspects of care. Our study may prompt initiatives both locally and nationally to improve compliance in ED management of Acute AF/AFL for our patients.

References:
1. Stiell IG, de Wit K, Scheuermeyer FX, Vadeboncoeur A, Angaran P, Eagles D, et al. (2021). CAEP Acute Atrial Fibrillation/Flutter Best Practices Checklist. Can J Emerg Med, 23(5), 604–10.

11:20-11:30 am

Exploring Transportation as a Barrier to Health Care in Rural Canada

Nicole Wisener 1*

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Introduction:
There has been increasing attention to barriers to accessing medical care in rural areas in recent years. Transportation-associated barriers are often cited as barriers to care, and can lead to missed appointments, adverse health outcomes, delayed treatments, or lack of medical care altogether1. This scoping review aims to explore the significance of transportation barriers to accessing healthcare in Canada. Focus will be placed on rural, remote, and Indigenous communities.

Methods:
A literature search was conducted to identify relevant peer-reviewed studies that assess transportation-associated barriers to medical care. Articles were screened and assessed for eligibility. From eligible studies, data were extracted and findings were summarized.

Results:
A total of 35 articles were included in the final analysis. The studies revealed common and uncommon barriers to health care in rural, remote, and Indigenous communities in Canada. The studies provided information on a range of healthcare services in these areas, their usefulness, and their shortcomings. The most frequently reported barriers to care with regards to transportation were related to transportation infrastructure, transportation costs, vehicle access, distance and time burden, and public policies.

Discussion:
Overall, evidence supports that transportation poses significant barriers to accessing medical care, especially for those living in rural and geographically isolated areas of Canada that have less health infrastructure than urban areas. Future research is needed to investigate how solutions can be implemented, such as incentives for drivers transporting patients, improved road infrastructure, and increased air transport.

Significance:
This work provides evidence for barriers to medical care for those living in rural areas of Canada, with a focus on Indigenous Canadians. This work demonstrates the intersectional nature of health disparities and provides useful suggestions on how these disparities can be addressed.

References:
Syed, S.T., Gerber, B.S., & Sharp, L.K., Journal of Community Health, 2013

1:30-1:40 pm

A Practical, Multi-Stakeholder Approach to Developing and Integrating a Longitudinal Planetary Health Curriculum into Medical Training

Liam Quartermain1, Sherry Tan1, Nieve Seguin1, Harry Wang1, Vanessa Bournival1, Nicole Prince1, Jennifer Shamess1, Isabelle Raiche1,2, Husein Moloo1,2

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2 Department of Surgery, The Ottawa Hospital, Ottawa, Canada

Introduction:
The Association of Faculties of Medicine of Canada has urged health institutions to build climate-resistant health systems and develop planetary health (PH) education1. However, medical schools have largely failed to implement PH curriculums, with only 15% of schools globally including such content in a 2019 survey2. Addition of PH into medical school education has lacked a comprehensive framework to guide and facilitate the process. Here, we describe a practical, real-world, multi-stakeholder approach developed to integrate PH into medical curricula at uOttawa.

Methods:
A PH working group was assembled comprising faculty, medical trainees, and a community partner. Educational competencies were first established to guide curriculum content, as such the core competencies developed by the Canadian Federation of Medical Students and UK Medical Schools Council. High-yield learning objectives (LOs) were developed around these competencies, with emphasis on promoting the knowledge and skills required to address climate change impacts specific to our local environment. A systematic curriculum scan was performed to identify where these LOs could be integrated into existing pre-clerkship and clerkship educational activities (ex., lectures, case-based learning, physician skills sessions, self-learning modules, and leadership electives.

Results:
56 PH LOs (17 pre-clerkship and 39 clerkship) were proposed for longitudinal integration into learning events across all years of study, and accepted by the curriculum renewal committee.

Discussion:
This framework offered numerous key advantages: employing the various skills of a multidisciplinary team, use of existing education resources, and integrations into existing learning events allowing for a feasible longitudinal curriculum.

Significance:
While there is existing literature on roadmap proposals for PH integration3, our work presents the first case study of real PH curriculum design in the context of an existing curriculum. We hope that other medical schools will utilize and build on this approach to implement PH curricula.

References:
1. Association of Faculties of Medicine of Canada. (2023, April 15). Academic Health Institutions Declaration on Planetary Health. Retrieved March 2, 2024, from www.afmc.ca/wp-content/uploads/2023/03/AcademicHealthInstitutionsDeclarationonPlanetaryHealth.pdf
2. Shea, B., Knowlton, K., & Shaman, J. (2020). Assessment of climate-health curricula at international health professions schools. JAMA network open, 3(5), e206609-e206609.
3. Oudbier, J., Sperna Weiland, N. H., Boerboom, T., Ravesloot, J. H., Peerdeman, S., & Suurmond, J. (2022). An evidence-based roadmap to integrate Planetary Health Education into the medical curriculum. Medical Teacher, 45(3), 328–332. https://doi.org/10.1080/0142159x.2022.2137015

Existing curricular event	Integrated learning objective	Planetary health competency
Mycology infection (lecture)	Understand Zoonotic disease spread secondary to habitat destruction and increased animal/human interaction	**Managing and Preventing Health Impacts**: changing infectious disease burden

1:40-1:50 pm

Exploring the Metabolic Link Between Heart and Brain Mitochondria in Heart Failure

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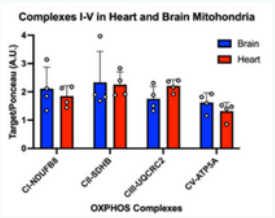
2 Ottawa Institute of Systems Biology, University of Ottawa, Ottawa, ON, Canada

Introduction:
Cardiovascular diseases (CVDs) are conditions that affect the heart and blood vessels. Heart failure (HF) is a type of CVD characterized by insufficient cardiac output to maintain physiological needs. The heart produces adenosine triphosphate (ATP) in mitochondria by oxidative phosphorylation (OXPHOS), which involved complexes I-IV (CI-IV) of the electron transport chain (ETC) and ATP synthase. In the failing heart, impaired mitochondria bioenergetics can lead to decreased ATP production and ETC activity1,2. The brain is another metabolically demanding organ that requires sufficient blood flow to maintain neurological function. This bi-directional interaction between the heart and the brain is known as the heart-brain axis. In cerebral arteries in an ischemia-reperfusion model in rats, research has suggested changes in mitochondrial oxygen consumption rate (OCR)3. Thus, reduced blood flow to the brain due to HF may contribute to mitochondrial dysfunction in both the heart and the brain. Our objective is to explore changes in mitochondrial bioenergetics and expression of CI-IV across the heart-brain axis.

Methods:
We used extracellular flux analyses to assess OCR, an indirect indicator of mitochondrial bioenergetic function. CI-driven OCR was measured in cardiac and brain mitochondria using various substrates and inhibitors of mitochondrial metabolism. We used western blotting to assess protein expression of the ETC complexes. Solubilized enriched mitochondria were loaded onto polyacrylamide gels and transferred to nitrocellulose membranes which were then incubated in primary and secondary antibodies. Membranes were imaged and analyzed using relative densitometry.



Results:
Extracellular flux analysis using the Seahorse XF96 analyzer revealed that Complex I-stimulated mitochondria had a basal OCR of about 20 pmol/min/ug of protein, which increased in response to ADP and decreased with oligomycin, an inhibitor of CV. Western blot results of OXPHOS protein levels showed that enriched brain and heart mitochondria have similar levels of CI-III and CV, as seen in Figure 1.

Discussion:
Extracellular flux analysis results indicate that mitochondria are functional and are consuming oxygen which is contributing to ATP production by OXPHOS. Western blot results reveal that mitochondria have similar levels of CI-V as compared to the literature4.

Significance:
Exploring the metabolic link between the heart and the brain is relevant as many patients with HF are at a higher risk of developing cognitive impairments. Additionally, the heart-brain axis is a novel field of research and thus our work would be contributing to the growing literature base.

References:
1. Stride, N. et al. Decreased mitochondrial oxidative phosphorylation capacity in the human heart with left ventricular systolic dysfunction. Eur. J. Heart Fail. 15, 150–157 (2013).
2. Sheeran, F. L. & Pepe, S. Posttranslational modifications and dysfunction of mitochondrial enzymes in human heart failure. Am. J. Physiol.-Endocrinol. Metab. 311, E449–E460 (2016).
3. Rutkai, I. et al. Cerebrovascular function and mitochondrial bioenergetics after ischemia-reperfusion in male rats. J. Cereb. Blood Flow Metab. 39, 1056–1068 (2019).
4. Davies, K. L. et al. Cortisol Regulates Cerebral Mitochondrial Oxidative Phosphorylation and Morphology of the Brain in a Region-Specific Manner in the Ovine Fetus. Biomolecules 12, 768 (2022).

1:50-2:00 pm

An Analysis of Representation of Black, Indigenous and People of Colour (BIPOC) Within Ophthalmology in Canada – A Focus on the Canadian Ophthalmological Society Annual Meeting

Nadine Cheffi*, BSc[1], Rishi B. Gupta, BSc[1], Jobanpreet Dhillon, BSc MSc MD[2], Bernard Hurley MD FRCSC[2], Adil Bhatti, MD FRCSC[2]

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2. *Department of Ophthalmology, University of Ottawa, Ottawa, ON*

Introduction:
There is a lack of demographic data and objective means to assess the growth of equity, diversity and inclusion and BIPOC representation within ophthalmology. Studies have demonstrated that BIPOC receive fewer opportunities to advance their careers and subsequently represent a small proportion of senior positions1. Involvement at national conferences plays a crucial role in promoting the progression of a physician's career1. The objective of this study was to evaluate the representation of BIPOC over a 19-year period at the Canadian Ophthalmology Society (COS) annual meeting, the largest ophthalmological educational gathering in Canada.

Methods:
Data from online program schedules between 2003 - 2022 was obtained. Data was extracted for the following variables and classified according to race: oral presentation, free workshop, skills transfer course, committee member, moderator, keynote, and panelist. Note that race was classified based on author name, description, and images as well as an exhaustive search of social media pages, institutional pages, and other online materials. The percentage of BIPOC in each year was calculated and trended for each category. Calculations were completed for both the total conference spots filled as well as with representation based on unique individuals.

Results:
From 2003-2022, the total percentage of BIPOC involved in any of the seven conference positions demonstrated a positive trend. Over 19 years, there was a 30.43% increase in BIPOC filling these positions (21.89% to 52.32%), with an average increase of 1.75% per year. Noted was the repetition of BIPOC filling multiple roles each year. After excluding duplicates and examining unique BIPOC in these positions, there was a 28.65% increase (22.06% to 50.71%), with an average of 1.43% increase per year. An increase in representation amongst all categories was observed, with the most significant represented category being skills transfer course instructors at 53.26%. BIPOC committee members were noted as the most underrepresented category with a total of 35.17% over the 19 years.

Discussion:
This study examines the representation of BIPOC in leadership positions at the largest ophthalmological meeting in Canada. While they are still underrepresented, the representation of BIPOC at COS has improved significantly from 2003 to 2022. Continuous analysis and awareness of the representation of BIPOC in leadership positions such as at COS will aid in limiting racial disparities in ophthalmology.

Significance:
This novel cross-sectional study, specifically the incorporation of data over 19 years of conferences, provides a unique viewpoint into racial representation in ophthalmology. The positive trend in representation over the years shows promising growth in representation and inclusion, further affirming the need for continuous conversations of EDI in medicine.

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2:00-2:10 pm

The Impact of Different Learner Arrangements on Modern-Day Emergency Department Staff Productivity

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Introduction
While emergency departments (EDs) across Canada are experiencing record-high wait times and staffing challenges1, the current impact of learners on staff physician productivity remains unknown. Existing literature on the topic predates recent changes in patient complexity and electronic medical record usage.2 The objective of this study was to evaluate the impact of learner arrangements on the productivity of staff physicians in the modern-day ED.

Methods
This was a retrospective cohort study involving all ED shifts at The Ottawa Hospital Civic and General Campus between April 2022 and March 2023. For each staff physician shift in this timeframe, the type of shift (ambulatory, non-ambulatory), learner arrangement, and number of patients seen per hour (PPH) by each staff physician were entered into a database. The relationship between PPH and learner arrangement was assessed using a two-sample, two-tailed t-test and accompanying descriptive statistics.

Results
Over the study period, 8,161 shifts were analyzed, including 5,233 in ambulatory care and 2,928 in non-ambulatory care areas. Among ambulatory care shifts, the average number of PPH was 2.09 (95% CI 2.07-2.11) when working alone, 1.81 (1.76-1.86, $p<0.001$) with a medical student, 1.79 (1.77-1.81, $p<0.001$) with a junior resident, 2.05 (2.02-2.09, $p=0.05$) with a senior resident, 1.76 (1.74-1.79, $p<0.001$) with a junior resident and a medical student, and 2.01 (1.96-2.06, $p=0.004$) with a senior resident and a medical student. In non-ambulatory care shifts, the average number of PPH was 1.40 (95% CI 1.33-1.47) when working alone (122 shifts, 4.2%), 1.42 (1.35-1.50, $p=0.63$) with a medical student (85 shifts, 2.9%), 1.48 (1.46-1.50, $p=0.02$) with a junior resident (1,013 shifts, 34.6%), 1.75 (1.73-1.78, $p<0.001$) with a senior resident (682 shifts, 23.3%), 1.56 (1.53-1.58, $p<0.001$) with a junior resident and a medical student (683 shifts, 23.3%), and 1.77 (1.73-1.81, $p<0.001$) with a senior resident and a medical student (343 shifts, 11.7%).

Discussion
Staff emergency physicians were shown to be as productive or more when paired with residents compared to working alone, with resident seniority increasing the effect. The effect of medical students on staff productivity was varied, with no change in non-ambulatory settings and decreased productivity in ambulatory settings.

Significance
This may help optimize scheduling of learners in academic EDs to best match patient arrival patterns.

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2:10-2:20 pm

Evaluating the Canadian Triage and Acuity Scale as a Predictor of Nursing Workloads in an Emergency Department Ambulatory Care Setting

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Introduction:
In emergency departments (ED), patient acuity has been shown to be a strong predictor of nursing workload (r = 0.80)1 and increasing nursing workloads have been associated with worse patient outcomes.2,3 In Canada, the standardized method for determining ED patient acuity is the Canadian Triage and Acuity Scale (CTAS).4 Given that international triage systems have been shown to have predictive value for nursing workloads in the ED,1,5 our objective was to evaluate the use of CTAS as a predictor for ED nursing workloads in an ambulatory care setting.

Methods:
We conducted a time-motion study to observe and measure the amount of time nurses spent on direct patient-care tasks (orders, treatment, and discharge) for each patient they interacted with over their shift. The study took place in the ambulatory care area of an academic tertiary care ED, which sees ~160 low-acuity ambulatory patients daily. Data was separated by CTAS score and an ANOVA with t-tests was performed for analysis as appropriate.

Results:
We observed 557 patients over twenty-three 12-hour shifts. On average, CTAS 2 patients required 11.0 minutes of nursing time, CTAS 3 required 8.5 minutes, CTAS 4 required 7.8 minutes, and CTAS 5 required 5.9 minutes (Figure 1). When re-grouped as high acuity (CTAS 2+3) and low acuity (CTAS 4+5), the groups were shown to differ significantly, with high-acuity patients requiring 9.2 minutes and low-acuity patients requiring 7.4 minutes of nursing time ($p < 0.05$).

Discussion:
Our analysis suggests that nursing workload for ambulatory ED patients is directly related to triage acuity using CTAS. This relationship is most evident when grouping CTAS by broader high and low acuity categories. This is in line with other studies showing a relationship of triage acuity with nursing workload using other triage scales.

Significance:
Using CTAS to predict nursing workload can help determine optimal nurse staffing in Canadian EDs. This may improve nursing workload and thereby lead to improved patient outcomes. Future research should be directed at repeating this study in other EDs, including non-teaching centres, as well as analyzing nursing workloads for non-ambulatory ED patients.

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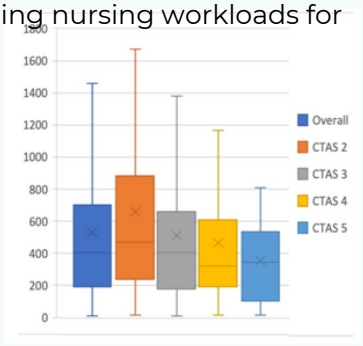

Figure 1. Box plot of average total nursing time spent per patient in seconds, by CTAS.

2:20-2:30 pm

Implémentation de l'intelligence artificielle pour l'élaboration des stratégies de communication scientifique: Stratégie de formation pour les orateurs dans le secteur de la santé

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Introduction :
Les cliniciens, débordés, peinent à trouver du temps pour les activités académiques, rendant difficile la conception d'outils de communication scientifique. L'intelligence artificielle (IA), notamment via des outils comme BingAI utilisant ChatGPT-4, leur offre des moyens d'organiser et d'enrichir leurs présentations de manière efficace et interactive, impliquant des sondages et des Q&A1,2. Cette étude vise à élaborer une formation en ligne spécifique aux cliniciens, leur apprenant à exploiter l'IA pour améliorer leurs outils de communication scientifique.

Méthodes :
La formation sera conçue en s'inspirant d'autres formation similaires disponible en ligne notamment celle de l'école Wharton3. Les vidéos suivront des lignes directrices proposés par Dong et al.4 Notre formation inclura de mini capsule vidéo abordant notamment comment utiliser l'IA pour générer des idées, organiser une présentation et identifier les lacunes potentielles. Distribuée à 6-12 chercheurs, son efficacité sera évaluée via : 1) qualité des présentations avant/après (clarté, engagement, innovation) ; 2) engagement du public (feedback en temps réel) ; 3) auto-évaluation des participants ; 4) feedback des pairs. Cette approche compacte permet une mesure précise de l'impact de la formation.

Résultats attendus :
Nous anticipons que notre formation simple et novatrice adapté pour les cliniciens et conférenciers va leurs permettre de produire des outils de communication de qualité.

Discussion :
L'évaluation de la formation s'appuiera sur les métriques décrits dans la section « méthodes ». Cette approche nous permettra de comprendre comment mieux intégrer l'IA dans les pratiques de communication scientifique. L'objectif est d'identifier les points d'amélioration de la formation.

Importance :
Ce projet met en avant l'importance d'intégrer de manière responsable l'IA dans la communication scientifique. Il pose ainsi une fondation pour une utilisation plus juste et éthique5 de l'IA dans le domaine de la santé.

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2:30-2:40 pm

L'effet du prompt engineering sur l'expérience d'utilisation de ChatGPT par les étudiants à la faculté médecine de l'Université d'Ottawa : un projet pilote

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Introduction:
La récente performance de ChatGPT, dans des examens médicaux standardisés a mis en lumière le potentiel des Grands Modèles de Langage (GML) dans l'éducation médicale (Brin et al., 2023). Toutefois, leur adoption soulève des défis majeurs car les GML présentent des limitations dans le domaine médical, notamment la possibilité de générer des informations inexactes ou obsolètes. Ce problème constitue un risque particulier pour les étudiants en médecine, qui peuvent ne pas être suffisamment équipés pour identifier cette limite. Pour remédier à cela, le prompt engineering (PE) est proposé comme une solution. Le PE nécessite une formulation stratégique des requêtes envoyées à l'IA pour obtenir des réponses plus précises. Pour ce faire, l'utilisateur devra être entrainé à son utilisation afin de pouvoir choisir des prompts efficaces.

Objectif :
Concevoir et évaluer l'effet d'une formation en PE sur les habiletés d'un échantillon d'étudiants en médecine à utiliser adéquatement ChatGPT-4.

Méthodes:
La formation sera conçue en s'inspirant des travaux de Chen et al., (2023) et abordera les meilleurs contextes pour l'utilisation des GML en éducation médicale, tout en enseignant des techniques pour améliorer la qualité des prompts. À la suite de la formation, 12 étudiants en médecine seront invités à : 1) utiliser ChatGPT-4 suivant une consigne précise en appliquant les règles apprise durant la formation et à 2) participer à des entrevues semi-structurées afin de partager leurs impressions et expériences sur leurs nouvelles interactions avec ce GML, la valeur éducationnelle de la formation ainsi que des suggestions pour l'améliorer.

Résultats:
Nous anticipons qu'après la formation, les étudiants rapporteront qu'ils ont de meilleure habileté d'utilisation de ChatGPT-4 et feront des suggestions pour améliorer la formation.

Signifiance:
Ce projet contribuera au développement d'un outil d'enseignement en santé tout en permettant de démontrer l'importance d'intégrer les techniques de PE dans le curriculum d'une faculté de médecine.

Références:
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Exploring the biomarkers of insomnia phenotypes using combined electroencephalography and electrocardiography

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Introduction:
By far the most prevalent of all sleep disorders, insomnia is characterized by dissatisfaction with sleep quality or duration and difficulties initiating or maintaining sleep that produce significant distress or impair daytime functioning.1 Despite its prevalence and impact,1 however, gaps in our understanding of insomnia permeate existing classifications of the disorder, currently based on the discrepancy between subjective sleep complaints and near-normal sleep duration. Up to now, there has been a general view that biological markers differentiate individuals with insomnia characterized by short sleep duration (<6 hours) from near-normal sleep duration (> 6 hours), the latter being proposed as resulting from psychogenic factors.2 However, limited work has been done to assess biological markers nested in brain and heart activity during sleep. Notably, as opposed to basic sleep duration, subjective insomnia complaints in the subgroup with near-normal sleep duration may relate to finer abnormalities in sleep physiology such as sleep depth, processes involved in the recuperative functions of sleep, and markers of brain and heart arousal emerging during sleep.

Methods:
We will conduct retrospective analyses from seven pre-existing polysomnography (PSG) databases comprising 682 people with insomnia and 200 healthy controls. Analysis of covariance will compare sleep-duration phenotypes and healthy controls in terms of sleep electroencephalography (EEG) and electrocardiography (ECG) features including slow-wave density and morphometrics, 1/f slope of the power spectrum, slow-wave activity (SWA) decay parameters, as well as EEG and ECG markers of arousal. Finally, a regression analysis will leverage EEG and ECG biomarkers to predict response to cognitive behavioral therapy for insomnia in a subset of participants with pre/post-intervention PSG.

Objectives:
The overarching aim of this project is thus to improve our understanding of insomnia subtypes with an emphasis on delineating the physiological and neuronal substrates of the near-normal sleep duration phenotype which has until now been considered psychologically driven. Furthermore, we aim to identify the physiological predictors of treatment response.

Expected results:
It is anticipated that, compared to healthy sleepers, individuals with the near-normal sleep duration phenotype will exhibit: lower overnight SWA levels, lower density and amplitude of sleep slow waves, and a flatter 1/f slope; altered homeostatic sleep regulation as reflected by lower initial levels of SWA and slower rate of SWA decay across the sleep episode; and higher signs of cortical and autonomic arousal during sleep. Finally, the core features that will be the most predictive of reductions in insomnia symptom severity will include the initial impairments in slow wave sleep and homeostatic regulation.

Significance:
This project will expand our understanding of the multifaceted physiological profiles underlying the heterogeneity of insomnia. This has the potential to stimulate the development of tailored interventions targeting individual pathophysiological profiles of insomnia and optimize triaging towards the most relevant treatment.

References:
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Post-partum experiences during the COVID-19 pandemic in Ontario, Canada

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Introduction:
Emergence of the COVID-19 pandemic greatly influenced the way post-partum care was delivered and received for women as health care institutions updated their policies to reflect public health guidelines that were designed to reduce viral spread1,2. This qualitative study aimed to understand better people's experiences with post-partum care after the onset of the COVID-19 pandemic in Ontario.

Methods:
We undertook a multi-method qualitative approach which included an online survey with individuals who gave birth on/after March 15th 2020 and semi-structured in-depth interviews with a sub-set of survey participants as well as healthcare professionals. We analyzed survey data using descriptive statistics and interview transcripts for content and themes using inductive and deductive techniques.

Results:
We received 295 survey responses and conducted 20 in-depth interviews with women and 10 providers. We identified 5 themes from discussions with participants: barriers to breastfeeding; a loss of social interaction and bonding time; mental health concerns; limited postpartum care, support, and services available; and recommendations to improve care in future pandemics.

Discussion:
Consistent with other Canadian studies1,2,3 negative postpartum experiences included a lack of support persons, poor post-partum mental health, significant problems with breastfeeding owing to limited in-person follow-up care and lack of in-person support. In the event of future health emergencies, healthcare policy makers should consider both the physical and emotional well-being of women and seek to adapt care provision to maintain positive mental health supports and ensure that patients feel supported.

Significance:
To our knowledge, this is the first study in Canada to provide suggestions from both patient and provider perspectives on how post-partum care may be improved during future pandemics.

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L'intersection de l'intelligence artificielle et l'expérience d'apprentissage des étudiants en professions de santé à l'Université d'Ottawa : une analyse qualitative.

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Introduction:
Actuellement dans le monde, l'utilisation de technologies basées sur l'intelligence artificielle (IA) est devenue courante dans l'offre de soins de santé, la formation de professionnels de la santé et l'industrie pharmaceutique1. Même si elle soulève parfois des questions d'ordres éthiques, cette innovation aide désormais les cliniciens à prendre de meilleures décisions surtout dans certaines spécialités comme l'imagerie diagnostique et la dermatologie2. Les étudiants en profession de santé à l'uOttawa doivent être sensibilisés et formés à l'utilisation adéquate de ces nouveaux outils. Pour ce faire, un travail préalable reste à être effectué, car il existe une multitude de plateformes/outils d'IA utilisées par ces étudiants.

Objectif:
Ce projet vise à décrire la place de l'intelligence artificielle dans l'expérience d'apprentissages des étudiants en profession de santé à l'université d'Ottawa.

Méthodologie :
Une étude qualitative sera menée suivant le paradigme de recherche interprétatif. Un échantillonnage non probabiliste sera utilisé pour recruter 60 étudiants inscrits dans les programmes d'enseignement en santé de l'uOttawa. Ces derniers seront rencontrés en entrevue et les verbatim seront transcrits et analysés selon une approche thématique inductive telle que suggérée par les écrits de Braun et Clark.

Résultats escomptés:
Cette étude permettra d'identifier les plateformes/outils d'IA les plus utilisées par les étudiants des professions de santé de l'Université d'Ottawa, de décrire leurs habitudes d'utilisation, d'identifier pour ces étudiants les plateformes/outils qui selon eux leur permettent d'acquérir de nouvelles connaissances et de développer des compétences, d'explorer quelles sont selon eux les meilleures stratégies pour sensibiliser et former leurs pairs à l'utilisation adéquate de l'IA dans les apprentissages.

Importance/Impact:
Ce projet permettra de décrire l'expérience d'utilisation des plateformes/outils d'IA par les étudiants afin ultimement de les sensibilisés et les formés sur l'utilisation adéquate de ceux-ci.

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Exploring the Cellular Mechanisms Underlying Seizure-like Presentations in ATR-X Syndrome

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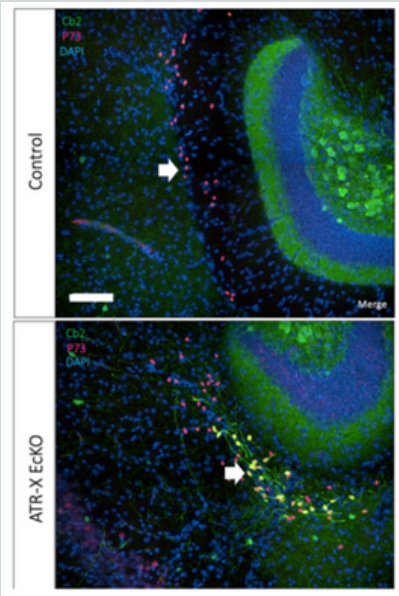

Figure 1: Cb2 and P73 Co-Localization of CR Cells in the HF of the KO

Introduction:
Alpha-thalassemia X-linked intellectual disability syndrome (ATR-X) is a rare genetic neurodevelopmental disorder caused by variations in the gene encoding the chromatin remodeler ATRX1. Neurodevelopmental disorders (NDD) have a prevalence of 2-3% in the global population, of which ~10% of NDDs are impacted by alterations in chromatin/transcription remodeling genes such as ATR-X1. Approximately 30% of ATR-X syndrome patients are diagnosed with seizures2. Seizure events are a disabling functional phenotype in congenital NDDs3. Potential epileptogenesis and the formation of hyper-excitable neural networks reinforce the need for pre-clinical research. Through IHC analysis of cortical brain tissue in our Emx1-Cre AtrxEcKO mouse line, we identified a significant aberrant presence of calretinin (Calb2) positive cells in the hilar fissure (HF) of adult AtrxEcKO mice. We reasoned that these misplaced Calb2 + cells might be Cajal Retzius (CR) cells. It has been shown that the persistence of CR cells in the adult HP can be a cause of epilepsy4. We aim to determine when and how the misplaced CR cells developed and to identify whether the KO mice are more susceptible to seizures.

Methods:
To address the first aim, we conducted immunofluorescence with different CR-specific markers to explore whether they are CR cells and where they may arise from. To investigate the second aim of seizure susceptibility, we intraperitoneally injected a cohort of WT and AtrxEcKO mice with kainic acid, a known inducer of CR cell-driven seizures.

Results:
The two different markers used in aim 1 (Calb2 and p73) showed colocalization in the KO but not the WT (Fig. 1) indicating an aberrant persistence of CR cells postnatally from different origins. For the second aim, we observed a significant difference in seizure intensity between groups indicating sensitivity in the AtrxEcKO.

Discussion:
These data provide a foundation for the exploration into the mechanisms behind the aberrant presence of CR cells in the HF of the KO mice. Further directions include the investigation of different developmental time points to distinguish if more are being generated or whether less cells are dying in the postnatal period.

Significance:
The purpose of this research is to identify a molecular mechanism behind the functionally debilitating presentation of seizures present in 30% of patients2 with ATR-X syndrome and contribute to future research aimed at rescuing the phenotype.

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Attitudes Regarding Science Knowledge and Clinical Trials

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Introduction:
While cancer clinical trials (CTs) success rates have been on the increase, smaller centers in Ontario still have considerably lower accrual rates than larger centers. This study aimed to explore what influences participation of patients in CTs by gauging the community's attitudes towards scientific knowledge and assessing methods of increasing positive associations with clinical trials.

Methods:
A mixed method approach was taken involving a survey disseminated to the general community along with qualitative semi-structured interviews through a focus group formed from survey participants. Thematic analysis of transcript from the focus group was completed to determine key themes related to patient hesitancies and considerations during CTs.

Results:
Initial results from the survey brought insight into primary hesitations about CTs, what influences comfortability with certain procedures for research versus clinical care, and concerns about lack of scientific communication with the public. Results of the thematic analysis revealed prominent areas of need such as approaches considering a patient's situation and motivating factors, local research advocacy and transparency for patients participating in CTs.

Discussion:
Results from both aspects of the study are beneficial in understanding the public's attitudes towards both clinical trials and scientific knowledge as well as unveiling areas of need and the primary hesitancies that patients and the public face when considering participation in a CT. The results both indicate a lack of outreach, advocacy, and in certain cases, transparency between the scientific research and the clinical impact on patients and the public.

Significance or Impact:
These results will be used to help find ways to improve upon current CT recruitment through making necessary changes that address the areas of need and hesitancies that have been raised by both participants and observers. They also strongly suggest improving upon finding ways to break down barriers between patients and the research they are being asked to participate in.

Les enseignants d'anatomie dans les formations de santé: une revue de la portée

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Introduction:
Dans les différents programmes d'enseignement en santé, il existe une grande variété quant au profil des enseignants qui dispensent les cours d'anatomie1. Il a été constaté que ces enseignants n'ont pas tous eu les mêmes formations de base. Par exemple, ils peuvent être des cliniciens avec ou sans formation de base en enseignement des sciences anatomiques, des personnes ayant une formation médicale et de l'expérience en dissection anatomique, des anatomistes avec ou sans formation médicale de base2. À notre connaissance, aucune synthèse exhaustive de l'état des connaissances sur ce sujet ne s'est encore intéressée à leurs profils.

Objectif:
L'objectif de cette revue de la portée est d'explorer le profil des enseignants de l'anatomie humaine dans les domaines de formations aux professionnels de la santé notamment pour ce qui est de leurs formations préalables, de la profession de santé dans laquelle ils enseignent, des systèmes enseignés aux étudiants ainsi que des stratégies d'enseignement utilisées par ceux-ci.

Méthode:
Ce travail sera effectué conformément aux lignes directrices PRISMA. Les principales sources de données incluront MEDLINE, EMBASE, CINAHL, PsycINFO, Eric, et Education Source. Les études effectuées auprès des enseignants d'anatomie dans toutes les disciplines de la santé seront incluses. Tous types d'études qui permettront de répondre à l'objectif fixé seront considérés sans aucune limite de date de publication. Les articles seront traités à l'aide de COVIDENCE puis synthétisés de façon narrative.

Résultats attendus:
Nous prévoyons que les données recueillies dans la littérature nous permettront de cartographier le profil des enseignants d'anatomie plus particulièrement pour ce qui est de leurs formations préalables, de la profession de santé dans laquelle ils enseignent, des systèmes enseignés aux étudiants ainsi que des stratégies d'enseignement qu'ils utilisent.

Conclusion :
Ce projet fera une mise à jour des connaissances sur le profil des enseignants d'anatomie.

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Influence de la réalité virtuelle sur l'acquisition des connaissances anatomiques par les étudiants en médecine

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Introduction :
L'anatomie est une science clé dans le cursus médical, car elle fournit une compréhension de base de la structure et de la fonction du corps humain. Cette science permet aux étudiants en médecine d'acquérir des connaissances théoriques indispensables à leur pratique clinique future. De nos jours, face à des étudiants de plus en plus réceptifs aux nouvelles technologies dans l'apprentissage, les méthodes traditionnelles peuvent être limitées dans leur capacité à fournir une compréhension approfondie et pratique de la structure anatomique. La réalité virtuelle (RV) est une technologie avancée au potentiel prometteur qui apporte une dimension manquante à l'enseignement de l'anatomie.

Question de recherche :
Quel est d'une part l'effet d'un cours d'anatomie du système nerveux central offert via la réalité virtuelle sur l'amélioration des connaissances des étudiants sur le sujet et d'autres part leurs perceptions vis-à-vis de cette technologie ?

Méthode :
Nous allons effectuer un essai contrôlé randomisé avec un échantillon composé d'étudiants de première année de médecine. Le groupe expérimental recevra le cours via la RV tandis que le groupe contrôle recevra une lecture en ligne. Avant et après l'intervention, il sera demandé à l'ensemble des participants de compléter un test en ligne sur l'état de leurs connaissances.
Le post test intégrera des questions sur leur perception de la RV. Un test de comparaison des moyennes (test de t) sera utilisé pour déterminer si la différence des scores obtenue dans les deux groupes est statistiquement significative.

Résultats attendus:
Nous prévoyons une amélioration significative de l'état des connaissances du groupe expérimental après le cours en RV versus le groupe contrôle.

Conclusion:
Cette recherche ouvre de nouvelles perspectives avec la RV qui pourrait jouer un rôle crucial dans la formation des médecins de demain.

A Promising Path: The Potential Benefits of Implementing Universal Basic Income in Canada to Improve Mental Health and Well-being

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Introduction:
Exploring the potential benefits of implementing a universal basic income (UBI) in Canada reveals a promising path towards improving the mental health and well-being of its citizens. Previous UBI pilots conducted in Canada and globally have shown promising results, demonstrating that providing a basic income can have a positive impact on mental health.

Decreased feelings of anxiety and depression, improve mental health, and increased socialization have been reported in participants of the Ontario Basic Income pilot project2. One key way in which UBI can improve mental health is by providing financial security3. Individuals with greater financial stability are more likely to engage in healthier behaviors, make better decisions, and seek specialized medical care, leading to improved physical health outcomes1,4. In addition, UBI has the potential to enhance educational opportunities by removing financial barriers to accessing further education and training5. Studies have shown that individuals with access to a basic income are more likely to pursue higher education or skill development, leading to increased opportunities for personal and professional growth3,5.

Methods:
A scoping review will be conducted to provide a comprehensive search of literature on universal basic income and barrier-free impact programs in Canada. This will include analyzing and synthesizing existing studies and reports on the positive impacts of these programs on mental health outcomes. The review will aim to provide an overview of the current evidence base and identify gaps in research on the topic.

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Exploring the impact of COVID-19 on the sexual and reproductive health experiences of Ontarian womxn with physical disabilities: A multi-methods qualitative study

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2Cambridge Reproductive Health Consultants (Cambridge, United States)

Introduction:
The COVID-19 pandemic exacerbated challenges associated with accessing contraception and sexually transmitted infection (STI) testing due to service disruptions in Ontario.1,2 The stay-at-home directives imposed by the government contributed to the increase in gender-based violence. Abortion care remained prioritized during the pandemic but shifted to medication abortion via telemedicine.3,4 Due to the changing guidelines and protocols, women, transgender men, and gender non-binary individuals (womxn) with disabilities may have been at a greater disadvantage of accessing sexual and reproductive health (SRH) services. Research has shown that women with disabilities may experience stigmatisation, receive inadequate sex education, and encounter barriers in healthcare settings.5 However, little is known about the experiences of womxn with disabilities accessing SRH care during the pandemic in Ontario.

Objectives:
The objectives of this study are to: 1) Provide a voice to the SRH experiences of Ontarian womxn with physical disabilities with specific attention to information and services related to contraception, abortion care, and STI prevention, screening and treatment; 2) Explore the ways that pandemic-related public health measures impacted the delivery and accessibility of SRH information and services to womxn with physical disabilities in Ontario; and 3) Identify strategies to improve SRH information and services of womxn with physical disabilities living in Ontario.

Methods:
We are in the process of collecting survey data via SurveyMonkey about womxn's experiences accessing abortion, contraception, and STI testing services from March 2020 to April 2021. We are also in the process of conducting in-depth semi structured with a sub-set of survey participants to delve deeper into the participants' experiences including utilisation of the telemedicine for SRH service delivery.

Expected results:
This project enables womxn with physical disabilities to share their experiences accessing SRH services during the pandemic. Our intent is to highlight gaps in SRH care before and during the pandemic and explore the barriers and facilitators associated with accessing services in person and through telemedicine within Ontario. Data collection is ongoing, and we expect to have preliminary results at the time of the conference.

Significance:
This study provides a voice to womxn with physical disabilities, a population that has often been ignored in healthcare and reproductive research. We will disseminate results to the disability community and with the aim of improving policy interventions and service delivery strategies. This study will highlight areas for further research into SRH care within this population.

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ABOUT

DR. VERA ETCHES

Dr Vera Etches, Medical Officer of Health, Ottawa Public Health

Dr. Etches was appointed as Medical Officer (MOH) of Health for Ottawa Public Health (OPH) in April 2018, having served as Deputy MOH for three years and Associate MOH for five years before that. She is passionate about preventing illness and injury and working with partners across many sectors to keep people well and to promote population health. Highlights include fostering a culture of community and client engagement and providing information to help people navigate the COVID-19 pandemic. She is also committed to public health work to address inequities in health status stemming from racism and colonialism.

Dre Vera Etches, Médecin chef en santé publique, Santé publique Ottawa

La Dre Etches a été nommée médecin chef en santé publique pour Santé publique Ottawa (SPO) en avril 2018, ayant été médecin chef adjointe en santé publique pendant trois ans et médecin adjointe en santé publique pendant cinq ans auparavant. Elle se passionne pour la prévention des maladies et des blessures et le travail de collaboration avec des partenaires de différents secteurs visant à assurer le bien-être de la population et à promouvoir la santé des résidents. Elle est connue pour favoriser une culture de mobilisation de la communauté et de la clientèle et à fournir des renseignements pour aider les résidents à traverser la pandémie de COVID-19. Elle se consacre également aux efforts de la santé publique visant à éliminer les inégalités en santé provenant du racisme et du colonialisme.

ABOUT

DR. JERRY MANIATE

Jerry M. Maniate, MD, M.Ed, EMBA, FRCPC, FACP, CCPE, CPC(HC) Associate Professor of Medicine Vice Chair of Member Support, uOttawa Department of Medicine Faculty of Medicine, University of Ottawa Executive Director, Equity in Health Systems Lab

Dr. Jerry Maniate is a clinician-educator at The Ottawa Hospital, an Associate Professor and inaugural Vice Chair of Member Support in the Department of Medicine at the University of Ottawa and is both an EDIA Advisor and a researcher at the Bruyère Research Institute. He is the Executive Director and Primary Investigator of the Equity in Health Systems Lab (www.eqhslab.com) which he founded in September 2021. The Lab is an international community of transdisciplinary researchers, healthcare professionals, educators, policymakers, learners, and patients who are seeking to make an impact on our community and health system with the work they are engaged with through a unique approach. His academic work and that of the EqHS Lab have been focused on understanding and addressing inequities, accessibility challenges, and social accountability in our health systems through collaborative partnerships using a scholarly lens.

Dr. Jerry Maniate est un clinicien-éducateur à l'Hôpital d'Ottawa, professeur agrégé et premier vice-président du soutien aux membres au Département de médecine de l'Université d'Ottawa, ainsi que conseiller en EDIA et chercheur à l'Institut de recherche Bruyère. Il est le directeur exécutif et investigateur principal du Laboratoire d'équité dans les systèmes de santé (www.eqhslab.com), qu'il a fondé en septembre 2021. Le laboratoire est une communauté internationale de chercheurs transdisciplinaires, de professionnels de la santé, d'éducateurs, de décideurs, d'apprenants et de patients qui cherchent à avoir un impact sur notre communauté et notre système de santé grâce à un approche unique. Son travail académique et celui du laboratoire EqHS est axé sur la compréhension et la résolution des inégalités, des défis d'accessibilité et de la responsabilité sociale dans nos systèmes de santé grâce à des partenariats collaboratifs utilisant une approche savante.

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Merci à nos juges sans qui cette conférence ne serait pas possible.

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