2022 UBC OKANAGAN

Interdisciplinary Student Health Conference

Thursday March 10, 2022

5:30 – 8:30 pm

Hosted virtually via Zoom

THE UNIVERSITY OF BRITISH COLUMBIA

Contents

Schedule

5:30 PM	**Welcome (10 mintue) & Keynote Address (20 min + 10 min)** *Main Session*							
	3 Minute Oral Presentations *Breakout Rooms*							
	Biomedicine & Pharmaceuticals	**Child and Public Health**	**Clinical and Emergency Care**	**Community Health**	**Health Policy and Advocacy**	**Rural and Remote Health**	**Student and Social Health**	**Virtual and Digital Health**
	Room 1	**Room 2**	**Room 3**	**Room 4**	**Room 5**	**Room 6**	**Room 7**	**Room 8**
6:20 PM	Adeeb Malas Rob Velzeboer	Brianna Tsui	Jordanna Roesler	Rebecca Anderson	Rachel Hussey	Reagan Chicoine	Eric Ferguson	Michelle Yang
6:27 PM	Endrio Rambelli Riya Naik	Lindsay Booth	Natalia Bereznicki	David Byres Victoria Bester	Morgan Game	Kendra Corman	Dyuthi Dinesh	Vanessa Lo Jay Jang
6:34 PM	Lisa Renaud	Sofia Samper	Alanna Coady	Gloria Cho	Remi Kandal	Katie Del Buono	Madeleine Frame	David Shifflett Dawson Penner
6:41 PM	Conan Shing	Keyara Brody	Grant Greaves	Violet Ignace Kelsey Darnay	Dylan Rogers Alisha Sindhu Madyson Campbell	Lauren Eggenberger	Khushee Nair	Amané Halicki-Asakawa
6:48 PM	Spencer Ursel Ojogbane Amedu	Cara Johnston	Austin Pietramala	Paige Reekie Deniz Gündüz	Maxine van Zyl	Ashish Giri Emily Mayzes-Kotulla	Kierra Pritchard	Soumyaa Subramanium
6:55 PM		Paige Dafoe Rebecca Anderson	Kenedy Olsen	Alissa Taki	Monique Walsh	Livia Jonnatan	Jaime-Lyn MacLeod Eric Ferguson	Nadine Widjaja Ella Bannon
7:02 PM			Noorat Aujla	Andrea Tam Tristen Ramsay		Carley Paterson	Elana Wood Sonali Kuber	Michelle Yang
7:10 PM	**Break**							
	10 Minute Presentations *Main Session*							
7:20 PM	Liisa Wainman							
7:35 PM	Brian Hayes							
7:50 PM	Brookelyn koersen							
8:05 PM	**Awards & Closing** ***Main Session***							

Directory

Last Name	First Name	Room	Category	Time
Amedu	Ojogbane	1	Biomedicine and Pharmaceuticals	6:48 PM
Anderson	Rebecca	4	Community Health	6:20 PM
Anderson	Rebecca	2	Child and Public Health	6:55 PM
Aujla	Noorat	3	Clinical and Emergency Care	7:02 PM
Bannon	Ella	8	Virtual and Digital Health	6:55 PM
Bereznicki	Natalia	3	Clinical and Emergency Care	6:27 PM
Bester	Victoria	4	Community Health	6:27 PM
Booth	Lindsay	2	Child and Public Health	6:27 PM
Brody	Keyara	2	Child and Public Health	6:41 PM
Byres	David	4	Community Health	6:27 PM
Campbell	Madyson	5	Health Policy and Advocacy	6:41 PM
Chicoine	Reagan	6	Rural and Remote Health	6:20 PM
Cho	Gloria (Hyun Young)	4	Community Health	6:34 PM
Coady	Alanna	3	Clinical and Emergency Care	6:34 PM
Corman	Kendra	6	Rural and Remote Health	6:27 PM
Dafoe	Paige	2	Child and Public Health	6:55 PM
Darnay	Kelsey	4	Community Health	6:41 PM
Del Buono	Katie	6	Rural and Remote Health	6:34 PM
Dinesh	Dyuthi	7	Student and Social Health	6:27 PM
Eggenberger	Lauren	6	Rural and Remote Health	6:41 PM
Ferguson	Eric	7	Student and Social Health	6:20 PM
Ferguson	Eric	7	Student and Social Health	6:55 PM
Frame	Madeleine	7	Student and Social Health	6:34 PM
Game	Morgan	5	Health Policy and Advocacy	6:27 PM
Giri	Ashish	6	Rural and Remote Health	6:48 PM
Greaves	Grant	3	Clinical and Emergency Care	6:41 PM
Gündüz	Deniz	4	Community Health	6:48 PM
Halicki-Asakawa	Amané	8	Virtual and Digital Health	6:41 PM
Hayes	Brian	n/a	n/a	7:35 PM
Hussey	Rachel	5	Health Policy and Advocacy	6:20 PM
Ignace	Violet	4	Community Health	6:41 PM

Last Name	First Name	Room	Category	Time
Jang	Jay	8	Virtual and Digital Health	6:27 PM
Johnston	Cara	2	Child and Public Health	6:48 PM
Jonnatan	Livia	6	Rural and Remote Health	6:55 PM
Kandal	Remi	5	Health Policy and Advocacy	6:34 PM
Koersen	Brookelyn	n/a	n/a	7:50PM
Kuber	Sonali	7	Student and Social Health	7:02 PM
Lo	Vanessa	8	Virtual and Digital Health	6:27 PM
MacLeod	Jaime-Lyn	7	Student and Social Health	6:20 PM
MacLeod	Jaime-Lyn	7	Student and Social Health	6:55 PM
Malas	Adeeb	1	Biomedicine and Pharmaceuticals	6:20 PM
Mayzes-Kotulla	Emily	6	Rural and Remote Health	6:48 PM
Naik	Riya	1	Biomedicine and Pharmaceuticals	6:27 PM
Nair	Khushee	7	Student and Social Health	6:41 PM
Olsen	Kenedy	3	Clinical and Emergency Care	6:55 PM
Paterson	Carley	6	Rural and Remote Health	7:02 PM
Penner	Dawson	8	Virtual and Digital Health	6:34 PM
Pietramala	Austin	3	Clinical and Emergency Care	6:48 PM
Pritchard	Kierra	7	Student and Social Health	6:48 PM
Rambelli	Endrio	1	Biomedicine and Pharmaceuticals	6:27 PM
Ramsay	Tristen	4	Community Health	7:02 PM
Reekie	Paige	4	Community Health	6:48 PM
Renaud	Lisa	1	Biomedicine and Pharmaceuticals	6:34 PM
Roesler	Jordanna	3	Clinical and Emergency Care	6:20 PM
Rogers	Dylan	5	Health Policy and Advocacy	6:41 PM
Samper	Sofia	2	Child and Public Health	6:34 PM
Shifflett	David	8	Virtual and Digital Health	6:34 PM
Shing	Conan	1	Biomedicine and Pharmaceuticals	6:41 PM
Sindhu	Alisha	5	Health Policy and Advocacy	6:41 PM
Subramanium	Soumyaa	8	Virtual and Digital Health	6:48 PM
Taki	Alissa	4	Community Health	6:55 PM
Tam	Andrea	4	Community Health	7:02 PM
Tsui	Brianna	2	Child and Public Health	6:20 PM
Ursel	Spencer	1	Biomedicine and Pharmaceuticals	6:48 PM

Last Name	First Name	Room	Category	Time
van Zyl	Maxine	5	Health Policy and Advocacy	6:48 PM
Velzeboer	Rob	1	Biomedicine and Pharmaceuticals	6:20 PM
Wainman	Liisa	n/a	n/a	7:20 PM
Walsh	Monique	5	Health Policy and Advocacy	6:55 PM
Widjaja	Nadine	8	Virtual and Digital Health	6:55 PM
Wood	Elana	7	Student and Social Health	7:02 PM
Yang	Michelle	8	Virtual and Digital Health	6:20 PM
Yang	Michelle	8	Virtual and Digital Health	7:02 PM

Keynote

“An interdisciplinary journey: Why a metabolism researcher is leading the Airborne Disease Transmission Research Cluster”

Dr. Jonathan P Little, PhD
Associate Professor | UBC Killam Accelerator Research Fellow
Faculty of Health and Social Development (FHSD)| School of Health and Exercise Sciences

Adjudicators

Biomedicine and Pharmaceuticals
Dr. Sarah Purcell, MSc, PhD
Assistant Professor of Nutrition
Faculty of Medicine | Faculty of Science, UBC Okanagan

Child and Public Health
Dr. Barbara Oliveira, PhD
Postdoctoral Scholar
FHSD | School of Health & Exercise Sciences, UBC Okanagan

Clinical and Emergency Care
Mr. Jason Curran, MPH, PhD (candidate)
Manager, Rural Research & Physician Engagement
Interior Health (Research Department) | Rural Coordination Centre of BC (RCCbc)

Community Health
Ms. Christine Balfour RN, BScN, B.Ed, MA
Associate Professor | Team Lead Year 2, Community and Mental Health
FHSD | School of Nursing, UBC Okanagan

Health Policy and Advocacy
Dr. Viviane Josewski, MSc, PhD
Postdoctoral Research Fellow
Faculty of Medicine, UBC Okanagan

Rural and Remote Health
Oliver Wearing, PhD (candidate)
Laboratory Assistant
Faculty of Medicine | Dept. of Cellular & Physiological Sciences, UBC Okanagan

Student and Social Health
Dr. Rachelle Hole, PhD
Professor
FHSD | School of Social Work, UBC Okanagan
Director - Canadian Institute for Inclusion and Citizenship (CIIC)

Virtual and Digital Health
Mr. Mathew Vis-Dunbar, MAS, MLIS
Data and Digital Scholarship Librarian
UBC Library

Category 1: Biomedicine and Pharmaceuticals

Breakout Room: 1

Presentation Time: 6:20 PM

Adeeb Malas, Medicine; Rob Velzeboer

Cannabis dosing and administration for sleep: a systematic review

Velzeboer, Rob; Malas, Adeeb; Roesler, Jordanna; Hawkins, Michelle; Cullen, Katie; Boerkoel, Pierre; Lai, Wayne

Introduction: Cannabis products containing CBD, THC, or both are increasingly used for sleep disturbances. Though both prescribed and self-medicated cannabis is increasing, there is little evidence on efficacy, optimal dosing, or adverse effects of cannabis products for sleep.

Hypothesis: Cannabis formulations (synthetic and non-synthetic) improve sleep in adult patients with no history of chronic use and not undergoing withdrawal.

Objective: To perform a systematic review examining the effects of cannabis on sleep with emphasis on dosing; to guide cannabis prescribers in their recommendations to patients.

Methods: EMBASE, Medline, and Web of Science were searched and 4,551 studies were identified for screening by a team of six independent researchers. 569 studies were selected for full-text review and 39 were included in the study. Studies were tabulated and bias in RCTs was assessed using RoB 2.0.

Results: All 39 studies were tabulated based on disorder type, study type, and cannabis formulation. 8 out of 20 RCTs and 9 out of 13 observational studies showed sleep improvements after the administration of cannabis products, in addition to 6 case reports/series. 4 out of 5 clinical studies examining dronabinol, 6 out of 9 examining THC, 3 out of 6 examining nabilone, 3 out of 7 examining CBD, and 2 out of 6 examining THC:CBD formulations showed efficacy for sleep. 7 out of 12 clinical studies showed sleep improvements in patients with pain-related disorders, 5 out of 10 in patients with neurologic and psychiatric etiologies, and 5 out of 11 in clinical studies for primary sleep disorders. Adverse events included headaches, sedation, and dizziness, and occurred more frequently at higher doses, though no serious adverse events were observed. Regarding bias, 13 out of 20 RCTs were judged to be low risk, 5 had some concerns, and 2 were high risk.

Discussion: Despite many studies supporting the use of cannabis products for sleep, high-quality evidence remains limited. Heterogeneity in cannabis products, dosing, timing of administration, and sleep outcome measures limit the ability to make specific dosing recommendations.

Breakout Room: 1

Presentation Time: 6:27 PM

Endrio Rambelli, Applied Science; Riya Naik, Science

The Effectiveness of Indoor Aerosol Transmission Mitigation Strategies Applied to COVID-19

Rambelli, Endrio; Naik, Riya; Winkler, Jake; McCreary, Sara; Li, Sunny; Little, Jonathan

Background: The COVID-19 pandemic has raised concerns over airborne infectious particle (aerosol) transmission in indoor settings, especially in hospitals and shared spaces. Due to the known production of airborne particles from activities such as speaking or breathing, our study aims to assess the possible reduction in these infectious aerosols with the use of a novel fabric called C-Polar in hospital curtains, sheets, or other common items.

Protocol: Key to this study was the existing negative charge on the surface of the COVID-19 virus, contrary to the positive and therefore attractive, electrostatic force on the C-Polar material. The C-Polar material promises to attract and destroy aerosolized viruses and bacteria. To assess its ability to attract particulate, the material will be exposed to an aerosolized matrix created with traceable plastic non-coding DNA conjugated microbeads, serving to simulate the negatively-charged virus particles in real-life scenarios. The microbeads will be aerosolized through a nebulizer and the resultant decrease in airborne beads in the presence of C-Polar, and the electrostatic potential of the material surface will be examined through the use of a particle counter and electrometer. A qPCR protocol is developed to confirm the actual resultant DNA left on the C-Polar fabric. The DNA amplification will be traced with an SYBR green fluorescent dye. This data will be used for the comparison with the standard curve, thus determining the amount of DNA in each unknown sample. The qPCR data demonstrating a high amount of DNA on the C-polar material would begin to confirm the efficacy of the electrostatic attraction. The qPCR and aerosol simulation data separately proving the efficacy of the C-polar material is still being collected, but their successful use could mean substantially mitigating harmful aerosol transmission from patient to clinician in hospitals.

Future work and Implications: With the characterization and simulated use of the C-Polar material, we hope to demonstrate the reduction of harmful aerosol droplets in the air by its use in items such as curtains or bed sheets. We aim to present a viable solution to the increased risk of aerosol transmission in indoor settings such as classrooms or hospitals.

Breakout Room: 1

Presentation Time: 6:34 PM

Lisa Renaud, Medicine

Towards improving autonomic and cardiovascular care for people living with spinal cord injury in the B.C. Interior

Renaud, Lisa; Wainman, Liisa; Hetkner, James; Martin Ginis, Kathleen A.; Krassioukov, Andrei V.; West, Christopher R

Introduction: The autonomic nervous system regulates essentially all involuntary bodily functions. Post spinal cord injury (SCI), autonomic disturbances and secondary health complications arise requiring greater access to specialist care. Family physicians are typically the healthcare providers outside of large tertiary centers providing ongoing care for people living with SCI. Common autonomic disturbances include autonomic dysreflexia, orthostatic hypotension, sexual dysfunction, and neurogenic bladder/bowel. Secondary health conditions commonly include pain, diabetes, and cardiovascular disease. It is therefore not surprising that the ongoing care for individuals living with SCI must take into consideration the management of secondary health and autonomic complications; however, there are no SCI specialist services within the Interior of B.C.

Research Question and Hypothesis: We are seeking to understand how individuals with SCI living in the Interior of BC feel about the care they receive for treating autonomic disturbances and offsetting the development of secondary health conditions. We anticipate that individuals with SCI in the Interior of BC may face unique challenges for managing their health due to local factors. To date, this has not been investigated but brought to our attention by the local SCI community.

Methods: We circulated a mixed-methods Qualtrics survey to individuals with SCI within the community in the Interior of BC and analyzed the data using descriptive statistics.

Results: All participants (n=15) reported family physicians as primary healthcare providers for SCI health related challenges. 92% of respondents report having a family physician in their community, with 36% of participants also receiving specialist care outside of their home community. Among various SCI-related health concerns, bowel function was the most reported and was rated low for local accessibility. Additionally, if SCI specialist care was available in the Interior of BC, 92% of participants would access that service.

Conclusion: In our first step of exploring the healthcare experiences of individuals with SCI, we have determined that there is an expressed need for local specialised SCI care in the BC Interior to improve healthcare outcomes. These results will be disseminated to the SCI community and stakeholders to determine next steps for improving healthcare access in the Interior of BC.

Breakout Room: 1

Presentation Time: 6:41 PM

Conan Shing, Health and Social Development

LOOP GAIN CONTRIBUTES TO SEX DIFFERENCES IN HIGH ALTITUDE SLEEP DISORDERED BREATHING

Shing, Conan.LH; Bird, Jordan.B; Shafer, Brooke.M; Sands, Scott.A; Wilson, Richard.JA; Day, Trevor.A; Foster, Glen.E

Introduction: Periodic breathing (PB) is ubiquitous during sleep at high altitude, impacting males to a greater extent and associated with increases in the hypoxic ventilatory response. Currently, the apnea-hypopnea index and the oxygen desaturation index (ODI) are accepted methods to measure changes in PB during ascent. Loop gain (LG) however, is a novel way to quantify PB and ventilatory instability by representing changes in ventilation as a ratio of response over disturbance. This provides an improved understanding of changes in ventilation during ascent at high altitude.

Objectives: We aimed to determine if sex influenced periodic breathing during sleep after prolonged stay at high altitude when chemosenstivity is greatest.

Hypothesis: We hypothesized that at high altitude, periodic breathing severity would worsen over time in males but not females, owing to greater increases in LG in males.

Methods: Level 3 sleep studies were collected from 20 healthy participants (8 Female; age: 30±10 years; BMI: 25±4 kg/m2) at low altitude (1,130 m, baseline) and following ascent to (nights 2/3, acute) and residence at high altitude (nights 9/10, prolonged). Periodic breathing severity was measured from the ODI while LG was quantified from a ventilatory control model fit to nasal flow from scored polysomnograms. Linear mixed models and ANOVA statistical tests were completed to determine statistical differences across timepoints.

Results: ODI was similar between sexes at baseline (P=0.75) and acute altitude (P=0.33) but greater in males at prolonged altitude (30 events/hr, CI95%: 11 – 48, P=0.002). LG was similar between sexes at baseline (P=0.35) but greater in males compared with females at acute (0.09, CI95%: 0.02-0.17, P=0.01) and prolonged altitude (0.17, CI95%: 0.09 – 0.24, P<0.0001). The relationship between LG and ODI across all conditions was steeper in males compared with females (192 events/hr/unit LG, CI95%: 45 - 339, P=0.01).

Conclusion: In conclusion, periodic breathing during sleep worsens with time at altitude in males but not females, owing to greater sensitization of the ventilatory control system.

Funding: NSERC, MSFHR, Stober Foundation.

Breakout Room: 1

Presentation Time: 6:48 PM

Spencer Ursel, Science; Ojogbane Amedu, Applied Science

Creation of mucus factories using colon organoids to combat intestinal diseases

Ursel, Spencer; Amedu, Ojogbane; Bergstrom, Kirk; Zandberg, Wesley

Introduction: Patients with intestinal diseases often have dysregulated gut microbiota and reduced floral diversity. Recent studies have shown that glycoproteins in the gut are associated with anti-inflammatory interactions that could be used to treat intestinal diseases. The purpose of this research is to create a colon organoid system able to release MUC2, the glycoprotein that makes up mucus present in the colon. An organoid is a small mass of cells and tissue developed in vitro that resembles an organ. MUC2 could potentially be used for the development of prebiotics in the future.

Hypothesis: The addition of inhibitors DAPT and IWR-1-endo will cause differentiation into muc2 secretory cells in vitro differentiation of human colonic organoids into muc2.

Objectives: 1.) Develop a human minigut system to produce MUC2, the glycoprotein making up mucus; and 2.) Test the ability of this MUC2 to promote growth and anti-inflammatory functions of known intestinal symbionts.

Methods: To do this, we must (i) culture human colon organoids and determine their goblet cell status by histologic processing; (ii) Use pharmacologic approaches to differentiate the organoids into goblet cells and stimulate MUC2 secretion; and (iii) purify, harvest, and characterize the secreted MUC2 by electrophoresis and glycomics. To determine the anti-inflammatory effects of the MUC2 we will supplement media with purified MUC2 as the sole carbon source to test whether: (i) MUC2 stimulates growth of known human probiotic bacteria, and boosts their production of anti-inflammatory metabolites including short-chain fatty acids (SCFA) butyric, propionic, and acetic acid as analyzed by Gas Chromatography/Mass Spectrometry (GC/MS) of spent culture supernatants; and (ii) determine whether MUC2 can modulate potential colitis-inducing commensals to promote SCFA production.

Significance and Impact: This research will be novel and has the potential to support the development of new treatments for inflammatory bowel disease and colon cancer. The next step will be to scale up synthesis and test out the therapeutic potential in vivo using preclinical animal models of inflammatory bowel disease and colorectal cancer. We expect these studies will lead to novel approaches to synthesize abundant functional human MUC2 as a new and commercially viable prebiotic.

Category 2: Child and Public Health

Breakout Room: 2

Presentation Time: 6:20 PM

Brianna Tsui, Medicine

Correlates of Daily Physical Activity in Children and Youth with Disabilities in Canada

Tsui, Brianna; Arbour-Nicitopoulos, Kelly; Bremer, Emily; Sharma, Ritu; Voss, Christine

Background: Physical activity (PA) is important for physical and mental health in children. The National Physical Activity Measurement Study (NPAM) is the first, large scale study in Canada to investigate PA levels in children and youth with disabilities. Currently, there is lack of population level PA behaviour data in Canadian children and youth with disabilities. More knowledge is needed on PA levels and its determinants in this population.

Research Question: What are the main demographic, environmental and social support factors that are correlated with PA in children and youth with disabilities in Canada?

Methods: 178 children and youth with disabilities ages 4-17 years wore Fitbits® (Charge HR) for 28 days to assess PA (steps/d) in the larger NPAM study. Valid days were a minimum of 600 minutes of wear time/day. Geographic Information Systems (GIS) analyzed environmental factors near participant homes. A 5-kilometer coastal buffer (ocean, great lake) was created to determine participants' homes proximity to a coastline. Urban-rural location was identified using Statistics Canada classification. Daily maximum temperature (˚C) from government historical weather records was extracted from weather stations closest to each home. Demographic (age, gender, disability type) and social support (parental encouragement and parental transportation) data was parent reported. Ethics approval was obtained from institutional research boards in the larger NPAM study. Mixed effects regression analyses in R assessed associations between all factors and daily steps. Significance was set at $p<0.05$.

Results: Mean age was 10±3 years with 115 boys and 43 girls. Overall, mean steps/d were 9381±4791 steps across 22±7 days. Daily maximum temperature and parental transportation were significantly related to daily steps, with children who were transported by their parents (beta=1637.4,p=0.01) and those living in warmer temperatures (beta=51.2,p=0.00) having higher step counts per day.

Conclusion: Daily maximum temperature and transportation from parents are correlates of daily PA in children and youth with disabilities. Other environmental, social support and demographic factors in this study were only significant in univariate analyses. These findings suggest that further investigation is needed to determine how these factors influence daily PA in children and youth with disabilities.

Breakout Room: 2

Presentation Time: 6:27 PM

Lindsay Booth, Medicine

Assessing the Impact of COVID-19 Precautions on Classroom Communication for Adolescents with Hearing Loss: A Qualitative Study

Booth, Lindsay; Pauwels, Julie; Chadha, Neil K; Felton, Mark

Introduction: Public health measures such as mandatory masks and social distancing have become our new normal during the COVID-19 pandemic and present unique challenges to people who are hard-of-hearing. Previous studies of adults with hearing loss have found varied results with some reporting fewer communication challenges during the COVID-19 pandemic and others reporting an exacerbation of the daily effects of their hearing loss. Masks are known to attenuate speech volume to varying degrees. Studies of adolescents with hearing loss in classroom settings have found that hard of hearing students face unique challenges in classroom environments, particularly in classes relying primarily on didactic teaching or group discussions. These challenges can lead to increased social isolation for students with hearing loss. To our knowledge, no equivalent studies have been conducted on classroom communication for adolescents with hearing loss during the COVID-19 pandemic and its associated public health measures.

Central Question: How would adolescents with varying levels of hearing loss, including those with normal hearing, describe their experiences communicating in a classroom environment during the COVID-19 pandemic and its associated public health measures, such as masks and social distancing?

Methods: Adolescents in British Columbia ages 12-17 who attend school in-person and are in one of four groups are invited to participate: those with bilateral cochlear implants; hearing loss secondary to mastoidectomy; bone-anchored hearing aids; normal hearing. Participants are interviewed using a semi-structured one-on-one format virtually using Zoom. Interview recordings are transcribed and undergo a reflexive thematic analysis to conceptualize central themes using NVivo.

Results: Recruitment is ongoing with a target sample size of 5-6 interviews per study group. To date, 6 participants have been interviewed: 4 with bilateral cochlear implants, one with hearing loss secondary to mastoidectomy, and 1 with normal hearing. Commonalities among completed interviews include new challenges communicating during COVID-19, adaptation to listening to people wearing masks, and resilience.

Implications: The results and analysis from this study will help to document the unique experiences of adolescents with hearing loss during this unprecedented pandemic to provide insights into improving classroom communication under similar circumstances.

Breakout Room: 2

Presentation Time: 6:34 PM

Sofia Samper, Health and Social Development

Glycemic control in children and youth with type 1 diabetes in Interior Health: adherence to Diabetes Canada Clinical Practice Guidelines

Samper, Sofia; Pietramala, Austin; Taki, Alissa; Warshawski,Tom; Buhler, Holly; Thomson, Trish; Voss, Christine

Background: Type 1 Diabetes (T1D) is one of the most prevalent chronic conditions in children and youth and has dramatically increased throughout British Columbia in the past decade. T1D requires lifelong insulin therapy and frequent and invasive monitoring of glycemic control. Clinical Practice Guidelines provide evidence- and consensus-based guidance for clinicians to ensure adequate and age-appropriate delivery of care. Little is known regarding the management of pediatric diabetes in Interior Health, where a large geographic area and low population density present challenges to the provision of specialist pediatric diabetes care.

Objectives: To assess adherence to clinical practice guidelines for the management of pediatric diabetes in Interior Health.

Methods: A retrospective chart review of all clinical encounters at pediatric diabetes education centers within the Interior Health Authority was conducted for the years 2015-2019. In total, 6363 clinical encounters and 583 patients were identified. Aggregate summary values for each patient with T1D were calculated in terms of the number of unique HbA1C measurements per year and median HbA1C values per year. Descriptive summary statistics were calculated for each calendar year and compared against clinical practice guidelines (HbA1C screening frequency: 4x/year; glycemic target: HbA1C ≤7.5%).

Results: The number of pediatric patients with T1D receiving care in IH increased substantially between 2015-2019 (n=191 to n=324). The frequency of unique HbA1C measurements per patient was relatively consistent across years with a median of 2 (IQR 1-3) assessments per patient per year. The proportion of patients with 4 or more unique HbA1C assessments per year was low (11% in 2015, 13% in 2019). Median HbA1C was relatively consistent across the years at 8.7% (IQR 7.8-9.8), with approximately 1 in 5 patients achieving glycemic targets (≤7.5%).

Conclusion: Management of pediatric T1D is suboptimal in Interior Health. Preliminary results demonstrate a clear gap in certain aspects of care. Additional investigation is needed to identify barriers to adherence to clinical practice guidelines, as well as to identify what factors are related to adequate glycemic control in these patients.

Breakout Room: 2

Presentation Time: 6:41 PM

Keyara Brody, Science

Differing opinions: Understanding people's attitudes and reactions to the COVID-19 pandemic

Brody, Keyara; Dinesh, Dyuthi; Cho, Gloria; Szostak, Carolyn

Background and Objective: The COVID-19 pandemic has had a polarizing effect on communities, reflecting the diverse beliefs and opinions about the virus and associated vaccines. In order to manage the pandemic, it is important to understand the factors that influence people’s beliefs about strategies for controlling the COVID-19 virus. This research evaluates the extent to which people’s beliefs about COVID-19 management strategies are associated with their reactions to the pandemic and tendency to endorse conspiracy theories.

Methods: This research is part of the Differing Opinions: COVID-19 study. An online survey consisting of socio-demographic questions and established self-report questionnaires concerning COVID-19 and associated vaccine beliefs was administered to 862 self-selected UBCO undergraduate students during 2021W-Term 1. Preliminary analyses examine the inter-relationships between emotional/cognitive reactions to COVID-19, beliefs about COVID-19 management strategies, and endorsement of conspiracy theories.

Results: The majority of participants were female (67%). First-year students accounted for 35% of the sample while those in other years accounted for 20-23% each. The vast majority of participants were fully vaccinated (95%). On average, participants rarely worried about their safety or experienced traumatic stress-type reactions (e.g., intrusive thoughts, loss of sleep) related to the virus. Tremendous variability in responses was, however, evident. Moreover, worry and traumatic stress reactions were positively correlated.

Both cognitive and affective reactions were positively correlated with endorsement of public health mandates. That is, the more individuals worried or experienced traumatic stress reactions, the more they supported strategies designed to mitigate the pandemic and believed in their effectiveness. Interestingly, only traumatic stress reactions were positively correlated with endorsement of COVID-19 specific conspiracy theories.

Discussion and Implications: These results contribute to a deeper understanding of university students’ beliefs and experiences of the pandemic. Further analyses designed to evaluate the nature of individual differences (e.g., hierarchical multiple regression) in these relationships are planned. Consideration of these findings will aid the development of more effective strategies for managing the COVID-19 pandemic. For example, understanding the inter-relationships between reactions to the pandemic, beliefs about management strategies, and tendency to endorse specific types of conspiracy theories may help identify new approaches for framing educational campaigns.

Breakout Room: 2

Presentation Time: 6:48 PM

Cara Johnston, Health and Social Development

Stopping the Harm: Psychological Outcomes of Families of the Opioid Epidemic

Johnston, Cara; Coady, Alanna; Koerson, Brookelyn; Piercy, Jamie

Introduction: Between 2016-2020, 17,602 opioid-related deaths occurred in Canada, with devastating impacts on families, such as increased risk of mental illness, social isolation, and stigma. Evidence shows these strains are exacerbated by the COVID-19 pandemic. More research is required to ensure policy and services are meeting the needs of affected families. To our knowledge, this is the first study examining psychosocial impacts of the overdose epidemic and perceived barriers to supports conducted with a large sample of British Columbian families.

Objectives: This study aims to identify and describe the characteristics and perceived needs of British Columbian families affected by the overdose crisis.

Methods: Participants were recruited from late November 2020 to mid-January 2021 through Moms Stop the Harm (MSTH), a network of Canadian families impacted by substance-use related harms and deaths. In this study, we focused on members of MSTH residing in British Columbia. Participants completed an online battery of self-report measures. T-tests were conducted to examine differences between individuals whose loved ones have passed and those who are actively using substances. Analyses using multiple regression will explore demographic and psychosocial predictors of main health outcomes, including depression, substance use, and physical health. The impact of perceived stigma and social support will also be explored.

Results: Participants across Canada completed the online survey (N=552). Analyses for this study were conducted on a subset of British Columbian participants (N=354). Preliminary results reveal the participants are predominantly female (n = 337), many of whom (n = 233) have lost a loved one to the overdose epidemic, with many (n = 166) endorsing changes in health after loss.

Conclusion: As overdose-related deaths in Canada rise, understanding the impacts of overdose-related harms is paramount to meeting the needs of families within the converging crises of COVID-19 and the overdose epidemic.

Breakout Room: 2

Presentation Time: 6:55 PM

Paige Dafoe, Science; Rebecca Anderson, Science

Barriers Surrounding Swimming and Water Safety for Families of Children with Autism

Dafoe, Paige; Anderson, Rebecca; Szostak, Carolyn; Olsen, Lise

Introduction and objectives: Physical activity benefits social, physical, and psychological development in children with neurodevelopmental disorders (NDD). For children with autism spectrum disorder (ASD), additional benefits related to social inclusion and quality of life are evident. While many benefits are linked to active recreation for children with autism, barriers also exist. Currently, it is difficult to find empirical information regarding these barriers and how to address them in one place.

This project aims to develop a web-based resource for families with ASD to mitigate barriers surrounding safe and active recreation, starting with swimming and water safety. There are risks associated with water; for example, children with ASD who engage in elopement behaviour, such as running off, are at an increased risk of drowning. This web page aims to encourage water-based recreation by addressing the associated risks of water as well as benefits and suggested prevention strategies.

Methods: A literature review was completed using peer-reviewed journal articles and reputable grey literature to compile information on topics related to children with ASD and swimming and water safety. Academic articles were found through the PsycInfo database. Key words for this search included “water safety”, “autism spectrum disorder” and “swimming”. The literature review will inform a website page providing information related to safe recreation for swimming and water safety for families of children with ASD.

Results: Initial literature review results revealed that unintentional drowning because of elopement (running away) was the leading cause of death among children with ASD under 14. Swimming has been found to foster therapeutic, social, and physical benefits for children with ASD. Swimming was also reported to be the most preferred physical activity for children with ASD. This presentation highlights how the website page design will incorporate information on swimming benefits, risks, and water safety strategies.

Implications: This resource is being developed to aid families of children with ASD to promote water safety, mitigate barriers and boost confidence for families to participate in aquatic activities. In future, other domains of recreation will be developed for this online resource.

Category 3: Clinical and Emergency Care

Breakout Room: 3

Presentation Time: 6:20 PM

Jordanna Roesler, Medicine

Third-degree Heart Block Secondary to Lyme Carditis: A Case Report

Roesler, Jordanna; Ephtimios, Issa

Introduction: Lyme disease is commonly associated with fever, fatigue, myalgias, arthralgias, and erythema migrans and if untreated, can disseminate to the nervous and cardiovascular systems. An uncommon but serious complication of cardiac involvement includes third-degree heart block.

Objective: To illustrate the importance of Lyme disease recognition and highlight the systemic complications.

Methods: A previously healthy 42-year-old male developed Bellâ€™s Palsy and third-degree heart block secondary to Lyme disease which later completely resolved with antibiotic therapy.

Results: The patient was bit by an insect two months prior while in Southeastern Ontario and developed erythema migrans within the following weeks. Twice, the patient presented to a walk-in clinic and was treated with two subsequent courses of Cephalexin for a presumed spider bite. He developed a slight facial droop and was treated for Bell’s palsy. He continued to clinically worsen and developed fatigue, pre-syncopal episodes, and palpitations requiring hospital admission. Lyme serology assay returned positive for Borrelia burgdorferi and ECG showed complete atrioventricular (AV) dissociation with junctional escape rhythm. The patient was promptly started on IV Ceftriaxone and remained bradyarrhythmic while on telemetry. Repeat ECG demonstrated sinus rhythm with a 2:1 heart block and third-degree AV block was seen on transthoracic echocardiogram with secondary mitral regurgitation.

Discussion: The patient was discharged on oral Doxycycline 100mg twice daily and 19 days after discharge, 24-hour Holter monitor showed complete resolution and return to normal sinus rhythm without concerning arrhythmias or heart block. Nearly 3 months after the tick bite, the patient remained clinically well without any persisting symptoms. The prompt initiation of antibiotic therapy successfully treated the patient and avoided the need for cardiac pacing.

Conclusions: Lyme disease can pose a significant diagnostic challenge due to its often underrecognized clinical features and cutaneous findings. An uncommon but potentially fatal complication of Lyme disease includes complete atrioventricular block. Further awareness in the diagnosis and prevention of disseminated Lyme disease is needed.

Breakout Room: 3

Presentation Time: 6:27 PM

Natalia Bereznicki, Science

Predicting Discharge Status in a Post-Rehabilitation Stroke Population using a Cognitive Model, Stroke Characteristics and the FIM

Bereznicki, Natalia; Miller, Harry; Leitner, Damian; Daniels, Sarah

Background: Stroke is a leading cause of death and disability worldwide; the lasting impacts can affect individuals in their daily functioning. A portion of stroke survivors enter inpatient rehabilitation after initial management of acute stroke with variations in stroke type, lesion location, social support, and cognitive status. These factors can determine a patient's discharge status, which represents discharge location (i.e., care facility or home) and level of care needed. The Functional Independence Measure (FIM) can help decide discharge status, yet it is criticized for its inadequate depiction of cognition. Neuropsychological measures are more representative of a patient's cognitive status and may supplement or better predict a patient's discharge location. Leitner, Miller, & Libben (2018) found that neuropsychological measures outperform a baseline model in predicting functional outcome.

Objective: The current study intends to assess the predictive value of neuropsychological measures, demographic and stroke characteristics, and the FIM in relation to patients' discharge status post-stroke rehabilitation. This study will also try to replicate findings from Leitner, Miller, & Libben’s (2018) research.

Hypothesis: Based on the literature, it is expected that a model consisting of neuropsychological measures (assessing domains of visuo-spatial construction, memory, and executive function), stroke demographics (stroke type, lesion location, and marital status) and the FIM will most reliably predict discharge status in a stroke population.

Methods: Data files from a previous study at Kelowna General Hospital’s Rehabilitation Center will be used, with an estimated sample of 20-30 patients. Only patients who were treated at KGH and have no history of stroke, aphasia, or other serious comorbidities (i.e. dementia, psychiatric history, traumatic brain injury and diabetes) will be used. Demographic information, discharge summaries and performances on measures have already been collected and will be assessed. Once data is sorted and models are quantified, a hierarchical multiple regression will be conducted to determine which factors and or combinations of factors have the most predictive value.

Discussion: We speculate that this research will aid health-care settings by isolating which factors can prove most informative in assessing rehabilitative success in a stroke population.

Breakout Room: 3

Presentation Time: 6:34 PM

Alanna Coady, Arts and Social Sciences

A Comparison of the Factor Structure of the Personality Assessment Inventory Full and Short Forms in a Neurological Population

Coady, Alanna; Udala, Megan; Ohlhauser, Lisa; Campbell, McKenzie; Leitner, Damian; Scott, Jason; Wood, Lydia; Piercy, Jamie; Concepcion, Erwin; Libben, Maya; Miller, Harry

Objective: The Personality Assessment Inventory (PAI) has been validated in various populations. The short-form of the PAI (PAI-SF) has received less research attention, but is commonly used. More research examining the psychometric properties of the PAI-SF in different populations is needed. For neurological populations, research has revealed a two-factor solution for the PAI clinical scales, in contrast to the original proposed three-factor solution, but the factor structure of the PAI-SF has yet to be explored. The present study examined and compared the factor structure of the PAI and PAI-SF in a stroke sample.

Participants and Methods: Participants were patients from a Western Canadian tertiary hospital who had suffered a stroke (hemorrhagic n = 35, ischemic n = 117, undefined n = 19). Following transfer to the rehabilitation department, patients (N = 171) completed a neuropsychological evaluation including the full form of PAI. The same patient PAI protocols were utilized to score both the full and short forms Data was analyzed using Confirmatory Factor Analysis (CFA) and Principle Component Analysis (PCA).

Results: CFA goodness of fit parameters did not meet acceptable levels for the PAI full-form (RMSEA = 0.09, CFI = 0.75, and TLI = 0.71) or the PAI-SF (RMSEA = 0.09, CFI = 0.94, and TLI = 0.92). PCA results revealed a two-component solution for the clinical scales for both full and short-forms. Component 1 comprised 47.89% of the variance for the full-form and 49.73% of the PAI-SF. Component 2 comprised 13.83% of the variance for the full-form and 12.71% of the PAI-SF.

Conclusions: PCA demonstrated the PAI and PAI-SF had similar two-component solutions for clinical scales representing “internalizing” and “externalizing” behaviors, consistent with previous examinations of the PAI in neurological populations. Although CFA results differed from a three-factor model, PCA results varied only slightly from the original factors. Practically, this lends support for the psychometric properties of the PAI-SF in a neurological population, as results were nearly identical to the PAI full form. However, caution is warranted if making clinical decisions with the PAI-SF and more research is needed.

Breakout Room: 3

Presentation Time: 6:41 PM

Grant Greaves, Medicine

ERCP Under General Anesthesia Compared to Conscious Sedation (EUGACCS) Study

Greaves, Grant; Yee, Belinda; Perren, Joel; Richardson, Wes; Harding, Katie; Nguyen, Chau; Dr. Bak, Adrian; Dr. Perini, Rafael; Parker, Brent; Grey, Morgan;

BACKGROUND: Endoscopic retrograde cholangiopancreatography (ERCP) is a diagnostic and therapeutic procedure used to address pathologies of the pancreatic and biliary systems. ERCP performed under conscious sedation (CS) is the current standard of care but is limited by patient movement and agitation, especially in the context of lengthy or technically complex cases. Recent literature suggests that general anesthesia (GA) may optimize patient comfort and safety while reducing complications such as pancreatitis, perforation, and mortality. In October 2017, Kelowna General Hospital (KGH) transitioned the standard anesthesia modality for ERCP from CS to GA.

AIMS: To investigate differences in complications and patient outcomes for ERCP performed under CS before the practice change compared to GA after the practice change.

METHODS: Our study is a pre-post retrospective chart review of 2,233 patients (CS: n=1334; GA: n=899) who underwent ERCP between 2015 and 2020 at KGH. Demographic, clinical, and procedural data was extracted from patient charts, and the data was analyzed using univariate statistical analysis. Specific outcome measures assessed were adverse events. Key clinical data included type of anesthesia, pre-procedure diagnosis, and location of patient (ICU or non-ICU). Patient comorbidities were also collected in accordance with the Charlson Comorbidity Index (CCI) and utilized for multivariate analysis as there existed a significant difference in the mean CCIs of the two cohorts.

RESULTS: Rates of post-ERCP pancreatitis (6% vs. 4%; p=0.018) and procedure failure (8% vs. 3%; p<0.001) were statistically significantly higher in the CS cohort than the GA cohort.

There were no significant differences in the rates of 30-day mortality, ICU transfer, return to hospital, cholangitis, malignant hyperthermia, aspiration, MI, A Fib, perforation, bleeding, pneumothorax, or infection.

CONCLUSIONS: ERCP performed under GA compared to CS resulted in significantly lower rates of procedure failure and post-ERCP pancreatitis. It is a valuable practice change that should be considered by ERCP-related programs due to its potential to significantly improve patient safety outcomes.

Breakout Room: 3

Presentation Time: 6:48 PM

Austin Pietramala, Medicine

Clinical, Social, Behavioural, and Environmental Correlates of Glycemic Control in Pediatric Type 1 Diabetics in the BC Interior

Pietramala, Austin; Samper, Sofia; Taki, Alissa; Warshawski, Tom; Buhler, Holly; Thomson, Trisha; Voss, Christine

Introduction: Glycosylated hemoglobin (HbA1C) is an important measure for a patient managing their type 1 diabetes (T1D) as reduced levels play a significant role in minimizing long-term microvascular and macrovascular complications. HbA1C has many clinical, social, behavioural, and environmental influences which are documented in patient encounters, but the association of those factors and glycemic control within the pediatric population of Interior Health (IH) is unknown.

Research Question: To determine the association between clinical, social, behavioural, and environmental factors of glycemic control in pediatric T1D patients within the IH region.

Research Methods: A retrospective chart review was conducted for pediatric patients with T1D who received diabetes care through IH between 2015-2019. Variables collected include age, sex, HbA1C, location of clinic attended, frequency and composition of clinical encounters, insulin regimen, anthropometric data, and health behaviour screens pertaining to sleep, physical activity, tobacco, alcohol, and chemical substance use. For the current preliminary analyses, patient data in 2019 was used to assess differences in HbA1C by age, sex, and clinic location ($p<0.05$). Further analyses of HbA1C values according to other clinical- and behavioural factors are ongoing. All analyses were performed in R.

Results: In 2019, there were 334 patients (53.6% male, mean age = 13.58 (SD=4.35)), median HbA1C (IQR) was 8.625% (2.2). There were no significant associations between median HbA1C and age or sex. Median (IQR) HbA1Cs were significantly higher in patients attending the remote population dwelling diabetes clinic (10.4% (1.97)) compared to the other dwelling categories (urban, urban/rural, and rural populations: 8.7% (2.0), 8.4% (2.2), 8.7% (2.0), respectively). Additional analyses regarding the role of other clinical factors (e.g. frequency and composition of consults) and patient health behaviours on glycemic control are ongoing.

Conclusion: Our ongoing analyses regarding the potential multi-faceted correlates of HbA1C in children and youth in IH may shed light on these preliminary observations. This information will be useful to optimise the delivery of pediatric diabetes care in the IH region.

Breakout Room: 3

Presentation Time: 6:55 PM

Kenedy Olsen, Health and Social Development

Operationalizing the RE-AIM Framework for a physical activity coaching program for adults with spinal cord injuries during the transition from inpatient care to living in the community

Olsen, Kenedy; Martin Ginis, Kathleen A.; Lawrason, Sarah; LeCornu Levett, Cath; Walden, Kristen; McBride, Christopher B.; Ma, Jasmin K

Introduction: Individuals with spinal cord injuries (SCI) typically participate in less physical activity (PA) than the able-bodied population. In the SCI population, PA often peaks during inpatient rehabilitation and declines upon discharge due to many barriers present in the community.

Objective: The purpose of this study was to evaluate the effectiveness and sustainability of a PA coaching program delivered by physiotherapists and SCI peers during the transition from in hospital care to community-living using the RE-AIM (reach, effectiveness, adoption, implementation, maintenance) framework.

Methods: Six individuals (Mage=52.3) were recruited and received weekly PA coaching sessions from physiotherapists when in-hospital and a SCI peer when in community. Coaching sessions in hospital were delivered during routine patient care from physiotherapists. In community, ten 15-minute sessions were scheduled in accordance with patient needs and readiness with their SCI peer. The intervention was guided by the Health Action Process Approach model. Upon cessation of the intervention, data was operationalized to evaluate the five RE-AIM elements.

Results: Results demonstrated that the program reached 59.2% of inpatients at the participating hospital. Effectiveness was assessed via data extracted from semi-structured interviews conducted 6-months post-discharge, and surveys administered throughout the duration of the intervention. Interview data revealed overall positive feelings associated with the intervention. Aerobic PA levels were maintained from discharge (M=76.4 min/wk) to 6-months post-discharge (M=79.6 min/wk, $p>0.05$). Strength training significantly increased from discharge (M=16.0 min/wk) to 6 months post-discharge (M=85.6 min/wk, $p<0.05$). 15 physiotherapists and SCI peer coaches were trained on administering PA coaching sessions. 100.0% of recruited coaches adopted the intervention into their daily practice as assessed by questionnaires and clinical-client discussion lists. Measures of maintenance of PA behaviour demonstrated that 80.0% of participants remained physically active for the entirety of the intervention.

Summary/Conclusion: Results of this study demonstrated the valuable impact of transitional PA coaching on improving and maintaining PA behaviour in individuals with SCI to prevent declines in PA at discharge, and the importance of using program evaluation tools when implementing interventions in healthcare and community settings.

Breakout Room: 3

Presentation Time: 7:02 PM

Noorat Aujla, Health and Social Development

Interventions Targeting Atrial Fibrillation Management and Self-Care: A Systematic Review

Wilson, Ryan; Burton, Lindsay; Aujla, Noorat; Neill, Kaylee; Loewen, Peter; Marini, Noah; Kenzie, Claire; Davis, Dresya; Janke, Robert; Rush, Kathy

Background: Atrial fibrillation (AF), a chronic heart arrhythmia that produces symptoms like palpitations, chest pain, and weakness, can compromise quality of life (QOL) and increases the risk of thromboembolic stroke. Self-care (e.g., self-management, symptom identification) is an essential aspect of AF disease management to support patients in building skills and confidence to engage actively in their care, make decisions about treatment options, and manage risk factors. Identifying current barriers and facilitators influencing AF self-care can improve future health outcomes for AF patients.

Aims: This systematic review aims to synthesize the evidence of self-care interventions of AF patients compared to usual care.

Methods: The literature search of databases Medline, Embase, and CINAHL used keywords, synonyms, and truncations of AF and self-care concepts. Articles included focused on AF patients over 18 years; self-care intervention; measured patient-reported health outcomes, clinical outcomes, and/or healthcare utilization; and compared to usual care. Articles were excluded if: non-research, protocol, or review papers; preliminary findings; focused solely on medication adherence; and/or primary outcome was major bleeding. Findings were synthesized according to the self-care theory of maintenance, monitoring and management.

Results: Of the 2960 articles reviewed, 139 were selected for full-text, and 24 were included in the final synthesis. Patient-reported attitudes and behaviour generally improved with mobile applications and ECG recordings, educational interventions, and group medical appointments, while in-person, nurse-led, and digital educational interventions were shown to improve AF-related knowledge. Mobile application and educational interventions improved QOL, AF symptoms, medication adherence and reduced hospital readmission rates, while no difference was generally noted with interventions promoting physical activity and/or weight loss. Many self-care interventions also found greater aerobic capacity, reduction of weight, symptom burden and severity, as well as some indicating a decrease in complications and death. Conversely, usual care groups experienced a higher diastolic blood pressure, increased weight, and total cholesterol.

Conclusion: Educational and technology-based self-care interventions improved patient knowledge, QOL, AF symptoms, medication adherence, and were significantly more effective than usual care. As there is strong evidence supporting the benefits of educational and technology-based self-care interventions for AF patients, further uptake should be considered in clinical practice.

Category 4: Community Health

Breakout Room: 4

Presentation Time: 6:20 PM

Rebecca Anderson, Arts and Social Sciences

The Psychometric Comparability of the PAI and the PAI-SF in a Neuropsychiatric Population: A Pilot Study

Anderson, Rebecca; Coady, Alanna; Wood, Lydia; Hohner, Anika; Samper, Sofia; Mocci, Julia; Nystrom, Naomi; Concepcion, Erwin; Reynolds, Meredith; Udala, Megan; Libben, Maya; Piercy, Jamie; Miller, Harry

Introduction: The Personality Assessment Inventory (PAI) is a 344 item self-report measure of personality, psychopathology, and factors affecting treatment. The PAI short form (PAI-SF) contains the first 160 items of the PAI. The PAI-SF may be favoured as a screening tool or in situations where the full-form can lead to respondent burden and fatigue. The validity and reliability of the PAI have been thoroughly established among a number of populations; however, the validity and reliability of the PAI-SF are less conclusive. Further research is required to validate the PAI-SF among different populations. This project investigated the psychometric comparability between the PAI and the PAI-SF amongst a neuropsychiatric population.

Hypothesis: Based on previous literature, it is hypothesized that the PAI-SF will produce congruent results to the PAI in a neuropsychiatric population.

Methods: For this study, participant files were collected retrospectively from three facilities across western Canada and the United States. Participants had a neuropsychiatric diagnosis and were referred for neuropsychological testing in an inpatient acute care facility in southern British Columbia (BC), northern BC, and a long-term residential psychiatric care facility in Minnesota. The PAI-SF was scored from the first 160 items on the long-form. To determine the psychometric comparability of both tests, paired-samples t-tests, intraclass correlations and percent agreement between samples were analyzed.

Results: Analyses of participant data (N= 88) revealed that intra-class correlations ranged from .82 to .98. Agreement between the PAI and PAI-SF ranged from 78.4 to 100%. Symptoms were considered significantly elevated when they passed the clinical significance threshold for that subscale. When forms did not agree, the PAI-SF was more likely to be significant than the PAI. After a Bonferroni correction was performed, only one validity (Negative Impression Management) and one clinical scale (Anxiety) showed a significant difference between the PAI and PAI-SF.

Conclusion: The results demonstrated that the PAI and the PAI-SF have high reliability between subscales and moderate to strong agreement between the PAI and PAI-SF in a neuropsychiatric population. These findings align with previous literature; however, caution is warranted when making clinical decisions with the PAI-SF as more research is needed.

Breakout Room: 4

Presentation Time: 6:27 PM

David Byres, Arts and Social Sciences; Victoria Bester, Health and Social Development

The Toxic Drug Response Project

Bester, Victoria; Byres, David; Van De Mosselaer, Adrian; Knox, Lisa; Cates, Jordyn; Hamilton, Casey; Feddersen, Melissa; Bottorff, Joan; Airth, Lauren

Introduction: As COVID-19 continues, the toxic drug epidemic (TDE) in British Columbia (BC) has worsened exponentially; in 2021 BC lost 2,224 people to the TDE, a 26% increase from the 1,767 people lost in 2020. These deaths continue despite the public availability of naloxone, an antidote for opioid toxicity. Students and staff of the Voice Campus Health project at the University of British Columbia Okanagan (UBCO) worked with the community to understand the impacts of the TDE; evidence-based harm reduction interventions were identified to address community concerns. UBCO's Campus Health established an interdisciplinary Harm Reduction Team (HaRT) in December 2020 to provide naloxone training and services for people to check their drugs for harmful contaminants. Globally, UBCO is the only university offering regular drug checking with a Fourier-Transform Infrared Spectroscopy machine on and off campus.

Objectives: HaRT aimed to provide access to drug-checking, naloxone training, and peer-led education. HaRT also aimed to strengthen campus and community relationships to increase knowledge and access to resources.

Methods: Drug checking data (e.g., what the drug was purchased as, analysis, location, reactions to the drug) was anonymously collected through a database managed by the BC Centre on Substance Use (BCCSU). The BCCSU oversees drug-checking provincially. Naloxone training data was collected by recording the number of attendees and kits distributed. Finally, campus-community relationships were evaluated through the number of sites established.

Results: From December 2020 - September 2021, HaRT expanded to seven community locations with four grants and additional staff. Of the 517 samples checked, the majority were identified as depressants. Regarding campus-specific data, with students returning to campus, people have frequently and consistently accessed services; from October 2021 - December 2021, 285 students participated in peer-led education, drug checking, or naloxone training.

Conclusion: HaRT demonstrated the potential of a university program to improve access to drug-checking, naloxone, and peer-led education on campus and through relationships in the community. There is a clear need for harm reduction resources and education at UBCO and throughout the Okanagan. Future research should consider the feasibility of UBCO's harm reduction program model.

Breakout Room: 4

Presentation Time: 6:34 PM

Gloria (Hyun Young) Cho, Arts and Social Sciences

Differing opinions: Understanding the Beliefs and Attitudes about the COVID-19 Pandemic

Cho, Gloria; Dinesh, Dyuthi; Brody, Keyara; Szostak, Carolyn

Background and Objective: Public health mandates designed to mitigate the global COVID-19 pandemic have been very controversial. This reflects, in part, the diverse opinions concerning the coronavirus. The purpose of this research is to evaluate the nature of the individual differences in beliefs about COVID-19 and associated protective health strategies by considering people's beliefs in science and endorsement of conspiracy theories.

Methods: This research is part of the Differing Opinions: COVID-19 study. Participants were recruited with ads placed on Castanet and community Facebook pages. An online survey that included socio-demographic questions and validated measures of attitudes and beliefs about COVID-19 and associated vaccines was used. To determine the nature of individual differences in these beliefs, measures of health-related beliefs (including vaccine hesitancy), conspiracy theories, scientific literacy, and media use were included. This presentation focuses upon participants' beliefs about conspiracy theories and science.

Results: Preliminary analyses were conducted on the data from a community sample of participants (N=339) living in the Central Okanagan region. Age of participants ranged from 16 to 88 years (M=42). The majority were fully vaccinated (80%). Not surprisingly, participants expressed diverse beliefs concerning the pandemic. Beliefs that public health strategies were beneficial and that these strategies were effective in managing COVID-19 were positively associated with belief in science. Interestingly, belief in science was also associated with greater COVID-19 safety concerns. Conversely, the endorsement of COVID-19 management strategies was inversely related to conspiracy beliefs about COVID-19 and society at large. That is, participants who were less supportive of health management strategies were more likely to endorse conspiracy-related beliefs. The perception of protective measures as inconvenient, burdensome and costly was also positively associated with endorsement of conspiracy-theories, but inversely associated with belief in science and COVID-19 safety concerns.

Conclusions and Implications: The findings, to date, suggest that one's beliefs in science, conspiracy theories, and safety concerns are important for understanding an individual's choice to adhere to COVID-19 management strategies. Further analyses will evaluate the nature of these inter-relationships and socio-demographic variables using hierarchical multiple regression. Understanding these relationships will aid in developing more effective strategies for managing the pandemic.

Breakout Room: 4

Presentation Time: 6:41 PM

Violet Ignace, Health and Social Development; Kelsey Darnay, Arts and Social Sciences

Indigenous Community-Led Culturally Safe Traditional and Western Approaches to Healthy Weight and Diabetes Wellness

Igance, Violet; Darnay, Kelsey; Moar, Diana; Kurtz, Donna; Vrtar-Huot, Arlene; Cutts, Mary; Norris-Bebek, Sheila; McGregor, Rosanna; Camille, Carol; Terbasket, Edna; Michaud, Vicki; Watson, Jackie-Ellen; Elias, Caitlin; Jones, Charlotte; Olsen, Karlyn

Background: Health programs and community-led services that incorporate Traditional Indigenous and Western knowledge support wellness for Indigenous Peoples. Yet limited research focuses on the success of Urban Indigenous community-led wellness programs. Indigenous Peoples continue to experience the impacts of colonialization. Due to systemic racism and discrimination, many choose not to seek mainstream (Western) health services. Indigenous Peoples also experience higher rates of diabetes, obesity, and more severe complications than other populations.

Communities' Research Question: How to collectively develop, implement, and evaluate programs using wholistic Traditional (mental, spiritual, physical, emotional) and Western approaches for healthy weight and diabetes prevention, treatment, and management across generations?

Research Approach (Methods): This four-year project is led by a Collective of five Urban BC Interior Friendship and Métis Centre Elders, Knowledge Keepers, Traditional Healers, Community Members, university students, researchers, and the local health authority. Indigenous Methodologies, Community Advisory Teams and Elders guide all research activities and protocols. Qualitative and quantitative methods include Talking Circles, Community Gatherings, Cultural Safety Sessions, and Traditional Healing surveys. This informed culturally relevant Traditional and Western programs for diabetes and healthy weight.

Results: Eighty-nine Friendship and Métis Centre Community Member participants aged 18-85+ years attended 13 local, 4-8-week programs. Other Community-based and led activities include 6 Community Gatherings, 6 Cultural Safety Sessions, and 11 Talking Circles. Themes of teachings and sharing have included Traditional Medicines, Land-based wellness, cooking, nutrition and Traditional foods, Ceremony, exercise, foot/eye/dental care, among others. These co-developed, co-delivered, and co-evaluated Indigenous-led wholistic health and wellness Community Programs honour Traditional Ways of Knowing relevant to Indigenous communities' unique needs and priorities. Post-program, community members shared positive experiences of community connectedness, sense of belonging, and feeling culturally safe. Community Members reported knowing more and doing more towards their overall wellness.

Conclusion: Indigenous-led, community-driven, Traditional and Western approaches promote health equity and support Urban Indigenous Peoples' wellness.

Breakout Room: 4

Presentation Time: 6:48 PM

Paige Reekie, Health and Social Development; Deniz Gündüz, Applied Science

A ‘Personal Belongings Carrier’ (PBC) and its Impact on Vulnerable Communities

Reekie, Paige; Gündüz, Deniz; Chau, Shirley; Milani, Abbas

Background: For thousands of individuals living on the streets in Canada today, possessions offer a sense of belonging and security; this makes them an important variable when considering the physical and mental health of vulnerable communities. It is important for these individuals to have a sense of ownership and protection on this matter. Unfortunately, they are forced by circumstance to spend excessive amounts of time and energy protecting their possessions; this often acts as a barrier to accessing essential services.

Objective: The present qualitative study investigated how a locally engineered ‘Personal Belongings Carrier’ (PBC) can potentially improve the quality of life for homeless individuals in Kelowna.

Method: Two general group meetings have been conducted by the research group on the UBC Okanagan campus to receive feedback on the PBC design and its perceived usefulness. The participants were from the community of people with lived-experience of homelessness in Kelowna who were contacted by their community leader for the research meetings. The planned field tests are also aimed to be conducted with a group of 10 to 15 homeless individuals living in Kelowna, BC.

Results: It was found that individuals living homeless could benefit from the PBC, however, it must be optimally engineered with the diverse users in mind; otherwise it could lose its purpose. By the implementation of more functions to PBC such as solar panel for charging devices and built-in canvas tarp for protection from the elements, the individuals may have better experience using the device.

Future work: Based on this preliminary study, the development and use of the next generation of the PBC is expected to begin soon with a potential implementation in the city of Kelowna as a pilot phase. PBC may potentially be the most convenient device for people to use in the context of homelessness to ease homeless individuals’ usage of shopping carts and offer them a better sense of ownership. A literature review is also underway to determine how devices such as PBC can potentially be used to aid in other emergency response situations, such as flooding evacuations.

Breakout Room: 4

Presentation Time: 6:55 PM

Alissa Taki, Science

Weight status, blood pressure, and glycemic control in children and youth with type 1 diabetes in the Interior Health region

Taki, Alissa; Pietramala, Austin; Samper, Sofia; Warshawski, Tom; Buhler, Holly; Thomson, Trisha; Voss, Christine

Background: Within BC, the Interior Health (IH) region holds the highest prevalence of pediatric Type 1 Diabetes (T1D). A host of complications can arise following the onset of T1D, resulting in the need for extensive monitoring of glycemic control and comorbidities. Despite this importance, there is currently a lack of knowledge regarding pediatric diabetes management in IH.

Aims: To describe the population of pediatric T1D patients receiving care within IH in terms of glycemic control, BMI, and blood pressure (BP); and to assess the association between these parameters.

Methods: A retrospective chart review of pediatric T1D patients within 2015-2019 was performed. Data from the most recent year were aggregated for each patient to compute median values for age, hemoglobin A1C (HbA1c, %), BMI (kg/m^2), and BP (mmHg). BMI and BP values were standardized for age and sex (and height for BP), then categorized according to clinically relevant criteria (WHO and AAP, respectively). Group differences were assessed via chi-square- and t-tests (RStudio; $p<0.05$).

Results: In 2019, there were 357 pediatric T1D patients with clinical encounters in IH (47% female, mean±SD age 13.7±4.5 years). Of those, 91% had at least one recorded HbA1c value, 69% had at least one recorded BMI value, and 31% had at least one recorded BP value. Mean±SD HbA1C was 9.0±1.8, with only 19% of individuals meeting targets of ≤7.5. Mean±SD BMI percentile was 66.7± 7.4, with 37% of individuals classified as overweight/obese. Mean±SD SBP and DBP percentiles were 63.2±27.3 and 62.2±26.1, respectively; 39% had elevated BP and 18% were considered hypertensive. Significantly more females than males were overweight/obese (45% vs 30%, $p<0.05$). There were no other sex differences. Mean Hb1AC for individuals with elevated/hypertensive BP was significantly higher compared to normal BP (mean±SD Hb1AC 9.7±2.0 vs. 8.7±1.5, $p<0.05$). There were no significant differences in HbA1C by BMI category.

Conclusion: In 2019, pediatric T1D patients within IH exhibited concerning assessments of glycemic control, BMI, and blood pressure. Furthermore, it appears these parameters are not screened frequently enough according to clinical practice guidelines (HbA1C ~4x/year, BP 2x/year). More research is needed to identify determinants for these observations.

Breakout Room: 4

Presentation Time: 7:02 PM

Andrea Tam, Arts and Social Sciences; Tristen Ramsay, Health and Social Development

Sleep and Family Relationships Before and During the COVID-19 Pandemic: A Study of Okanagan Families with Preschool-aged Children

Keys, Elizabeth; Holtzman, Susan; Tam, Andrea; Ramsay, Tristen

Introduction: Since the start of the COVID-19 pandemic, the quality and duration of sleep for both children and parents worsened. Poor sleep can negatively impact family dynamics and long-term emotional and educational outcomes for children by causing family stress, chronic tiredness, and poor mood. Therefore, it is critical to understand changes in family relationships and sleep brought about by the COVID-19 pandemic.

Objective: The overall objective of this study is to describe how the COVID-19 pandemic has influenced the quality and duration of sleep and parent-child relationships in Okanagan families of preschool children aged 2 to 5 years.

Hypothesis: It is expected that, compared to the pre-pandemic 2019 cohort, participants in the COVID-19 cohort will report poorer sleep and lower family relationship quality, and there will be a significant association in both cohorts between sleep quality and family relationship quality - with a stronger link in the pandemic cohort.

Methods: This quantitative study will collect data during the current 2022 COVID-19 wave through an online survey tool (Qualtrics) and compare these to a pre-pandemic 2019 cross-sectional dataset that obtained data on technology use, sleep, and well-being from 390 Okanagan mothers of children aged 2 to 5 years. The online questionnaire will ask about parent-child and partner relationship quality, child sleep duration, parental sleep quality and fatigue, child and parental well-being and mental health, and child and household sociodemographic characteristics. Participants will be recruited through social media and community partners. To analyze data, a merged de-identified dataset will be created from both cohorts using SPSS software. Statistical tests will be conducted, including chi-square and independent samples t-tests to determine if significant differences exist between samples in sociodemographic characteristics, and using multivariate analysis of covariance to determine if differences between the two samples exist for child sleep duration, parental sleep quality and fatigue, and family relationship quality.

Implications: Findings will inform programs of local non-profit organizations aimed at mitigating negative impacts of the COVID-19 pandemic, such as those offering family services and counselling, and improve understanding of how sleep and family relationships in families with preschool-aged children have been impacted during the pandemic.

Category 5: Health Policy and Advocacy

Breakout Room: 5

Presentation Time: 6:20 PM

Rachel Hussey, Arts and Social Sciences

Understanding Suicide-related Attitudes and Knowledge

Hussey, Rachel; Subramanium, Soumyaa; Szostak, Carolyn

Introduction and Objectives: Suicide is the second leading cause of death among adolescents and young adults. Research has found that most people do not seek help when experiencing psychological distress, including suicidal thoughts and behaviours. An identified barrier to help-seeking by individuals who are suicidal is the stigma associated with suicide.

This research will contribute to enhanced understanding of individuals' suicide-related attitudes and the factors that influence these beliefs. This will aid the development of strategies designed to decrease help-seeking barriers and promote more effective suicide prevention.

Methods: This research is part of a study investigating the impact of suicide-related media reports on attitudes. This presentation focuses upon responses to three measures of suicide-related stigma (i.e., Stigma of Suicide Scale, Literacy of Suicide Scale and the Stigma of Help-seeking Scale) that were included in the initial online survey. Participants (N=393) were UBCO undergraduate students. Preliminary analyses evaluated the inter-relationships between the above measures.

Results: The majority of participants identified as female (75%). First-year students accounted for 33% of the sample while other years accounted for 19-26% each. Overall, the sample did not express strong stigmatizing attitudes. However, there was substantive variation. That is, some individuals expressed very stigmatizing beliefs while others did not. Preliminary analyses indicated that endorsement of stigmatizing adjectives to describe suicidal individuals was positively correlated with help-seeking stigma. These two measures were inversely correlated with suicide literacy and understanding. Interestingly, the tendency to attribute suicidality to depression and isolation (beliefs that are not completely accurate) was positively correlated with suicide literacy and inversely related to help-seeking stigma.

Discussion & Implications: Due to the significant costs associated with suicide, it is important to understand people's attitudes about suicide, and the factors that influence these beliefs. The nature of the observed inter-relationships will be evaluated by considering the influence of socio-demographic and media use variables, using hierarchical multiple regression. The results of this study will contribute to the knowledge of individuals' attitudes towards suicide and may help to mitigate help-seeking barriers. The results may help to enhance the effectiveness of existing psychoeducational campaigns and suicide prevention strategies at UBCO.

Breakout Room: 5

Presentation Time: 6:27 PM

Morgan Game, Arts and Social Sciences

Planning and piloting peer-led food skills workshops for UBCO students

Game, Morgan; Balasubramaniam, Hardikaa; Kierra, Pritchard; Vaillancourt, Sierra; Rutledge, Kassidy; Hamilton, Casey

Introduction: Food security is an issue that is prevalent on UBC Okanagan's campus, with 42% of students being food insecure. Lack of food security leads to negative physical, emotional, academic, and social effects, and these effects tend to be heightened when a student belongs to a marginalized group. Previous Campus Health research confirms that students identified lack of food skills and low confidence in the kitchen as a major barrier to their overall food security. Free food skills workshops were developed and piloted to address this issue.

Objectives:

A) Provide students with education in basic food skills

B) Increase food literacy

C) Provide free ingredients to increase accessibility for students

D) Increase opportunities for social connection

Methods: Food skills workshops were organized by the Campus Health student food security team. Workshop development was informed by previous Campus Health research, UBC strategic priorities, and campus stakeholder consultations. Workshops were promoted via newsletters and social media. Registration was on a first come, first serve basis. Food packages were pre-assembled and available for pick up on the week of the workshop at a central location on campus. The workshops were held over Zoom with the capacity for 20 student participants, who were encouraged to turn on their cameras and follow along live with a step-by-step recipe. An evaluation survey was developed and sent to workshop participants; results will be finalized after the Winter Term 2.

Preliminary Results/Conclusion: Five workshops were hosted Oct-Dec 2021; almost all sold out within two days of promotion and had a waitlist. This indicates interest and demand for food skills workshops. However, there were limitations with the registration process as some registrants failed to collect their ingredient package. This resulted in fewer waitlisted students participating. The issue of unclaimed packages is being addressed by a new registration process for Winter Term 2.

Verbal feedback from participants has been overwhelmingly positive, and indicate that the workshops have led to increased food literacy and food skills, and increased social connectivity. Final evaluation results will be available after the Winter Term 2.

Breakout Room: 5

Presentation Time: 6:34 PM

Remi Kandal, Medicine

The QPS Hub: Expanding quality, safety, and human rights during the pandemic and beyond

Vedam, Saraswathi; Zephyrin, Laurie; Hardtman, Pandora; Lusero, Indra; Olson, Rachel; Hassan, Sonia; van dn Broek, Nynke; Stoll, Kathrin; Niles, Paulomi; Goode, Keisha; Nunally, Lauren; Kandal, Remi; Bair, James

Introduction: During the COVID-19 pandemic, delivery of high-quality maternity services has been severely disrupted due to many factors such as burnout, lack of resources, and uncertainty around COVID-19 transmission. Women and community health workers report increased mistreatment, denial of admission to facilities, separation from their babies, unwanted interventions, and lack of access to care. These disruptions overlay existing high rates of maternal and perinatal mortality that low- and middle-resources countries report in the context of low health system capacity. In anticipation of additional waves of COVID-19 transmission and other crises, we need pragmatic tools that expand the capacity of front-line health workers to provide high quality, rights-based care, and ability of health care systems to address the structural vulnerability that disproportionately impacts women.

Research Question: How can we address the inequities in perinatal care perpetuated by the COVID-19 pandemic?

Hypothesis: The COVID-19 pandemic has resulted in human rights violations in perinatal care that has created a gap that can be addressed with an evidence-based package of open-source and accessible key documents.

Research Methods: Our goals were to: 1. Develop an algorithm/template for rapid reorganization to safely triage care; 2. Codify and disseminate existing best practice guidelines; and 3. Create an online repository of key documents that facilitate rapid reallocation of resources.

We planned to convene a multidisciplinary Global Perinatal Task Force (GPTF) on Birth Setting during COVID-19 to create guidance for a coordinated strategy and rational allocation of human resources, and mobilization of community facilities, providers, and supplies.

Results: To date, we have recruited 103 experts across obstetrics, midwifery, human rights, infectious diseases, pandemic and disaster planning, community health, and global health organizations such as the WHO. In Phase I, the GPTF collated a repository of key documents and developed a prototype visual map for organizing repository information through weekly subcommittee meetings. In Phase II, the Quality Perinatal Services Hub was created as an interactive e-health platform based on the repository.

Conclusion: The QPS Hub has the potential to become the default site to access trustworthy guidance and enhance exchange and uptake of best practices for high quality perinatal services.

Breakout Room: 5

Presentation Time: 6:41 PM

Dylan Rogers, Science; Alisha Sindhu, Health and Social Development; Madyson Campbell, Science

Development and Evaluation of a Curriculum for Using a Restorative Approach to Address Events of Healthcare Harm

Rogers, Dylan; Campbell, Madyson; Sindhu, Alisha; Reid, Colin; Koojiman, Allison; Faulkner, Melissa; Oelke, Nelly

Background: Every 78 seconds, a patient safety incident occurs in the Canadian healthcare setting, resulting in the deaths of 28,000 Canadians a year. Despite best intentions of the healthcare system, the response to such events – whether a complaints process or civil litigation – results in harm being compounded, which may have profound impacts on patients, families, and healthcare providers (HCPs). The polarizing effect of a quasi-judicial administrative process creates systemic barriers for patients to access 'justice', and subjects HCPs to shame and humiliation sustained in the face of medical errors. As interdependent and social creatures, humans are negatively affected when relationships breakdown. A Restorative Approach (RA) encourages conversation and sharing of experiences related to harm, so to articulate healing needs, reconcile relationships, and determine obligations for reparations. RA has yet to have been formally used to respond to harm in Canadian healthcare, though this novel approach demonstrates the potential to nurture fairness and candor among individuals and society.

Methods & Objectives: Through interactions with knowledge-users, evaluation of existing literature on restorative principles, and review of adult education guidelines, this project sought to develop and evaluate an educational curriculum for health-authority staff and providers on using a restorative approach after healthcare harm. The collected data informed the creation of a curriculum to be disseminated to two health authorities in British Columbia, and higher-education students of academic disciplines involved with public well-being. The curriculum is to be delivered as a hybrid course involving self-guided modules published via the learning management system Canvas, and corresponding group learning sessions facilitated through Zoom.

Results: By showing that relational processes support the healing of all parties, curriculum participants will feel confident in exploring alternative approaches to conflict resolution, be able to identify the primary tenets of a RA world view, and will have the foundations necessary to continue lifelong learning of RA. The effectiveness, relevance, and accessibility of the curriculum are to be evaluated via a Qualtrics survey. The resulting learner-statements and feedback will be used to adapt the curriculum and inform future training opportunities on using a restorative approach to permit healing after harm.

Breakout Room: 5

Presentation Time: 6:48 PM

Maxine van Zyl, Arts and Social Sciences

Cognitive frailty: Definition and Diagnostic Clarification

van Zyl, Maxine; Miller, Harry B.; Jakobi, Jennifer M

Introduction: Cognitive frailty is defined as the combination of physical frailty, which is characterized by an increased susceptibility to stressors, and mild cognitive impairment (determined as having a Clinical Dementia Rating of 0.5), without the presence of dementia. Cognitive frailty is a risk factor for dementia, falls, disability, and morbidity. The term was recently coined in 2013 by an International Consensus Group from the International Academy on Nutrition and Aging, and the International Association of Gerontology and Geriatrics, in response to the literature demonstrating the additive effects of cognitive impairment and physical frailty on disability. The concept of cognitive frailty considers the interplay between the physical and cognitive, and emphasizes the potential reversibility of the syndrome by improving physical and cognitive functioning. As such, the clinical implications of a cognitive frailty diagnosis compared to that of neurodegenerative diseases, include the potential for significant reduction in disability and morbidity, if addressed early. However, cognitive frailty and its parameters are still being defined and re-defined, presenting a barrier to clinical application by limiting clinician understanding, and hindering the use of appropriate diagnostic and treatment measures.

Objectives: This scoping review aims to identify discrepancies in the definition of cognitive frailty and to improve clarity, as well as suggest assessment measures and diagnostic criteria, based on those used for physical frailty and cognitive impairment.

Methods: Using keywords related to physical frailty and cognitive impairment, PubMed, CINAHL, PsychInfo, and Web of Science databases were searched to acquire articles published from 2010 until the present. Further criteria for articles included community dwelling participants, the use of a validated frailty measure, and neuropsychological testing to investigate the contributions of physical frailty and cognitive impairment to cognitive frailty.

Clinical Implications: In clarifying the parameters of cognitive frailty, the implementation of cognitive frailty diagnosis into clinical practise can be facilitated, along with improved diagnostic and treatment options. Given the potential reversibility of cognitive frailty, implementation into clinical practise could result in greater and earlier improvements in quality of life for patients.

Breakout Room: 5

Presentation Time: 6:55 PM

Monique Walsh, Health and Social Development

Co-producing Collaboration across Primary Care Workplaces

Walsh, Monique

Introduction: Recent policy changes in primary care are asking healthcare professionals to collaborate. Although counter-intuitive, collaboration can be explored through boundaries. Changing boundaries in this study included: partnerships, roles, and physical spaces. Boundary objects are used to bridge across boundaries and in this study included: personal protective equipment, funding applications, and virtual technology.

Objectives:

1. To explore when collaboration is happening, who and what are involved in these collaborations, and what sort of action is taken.
2. To demonstrate how collaboration in primary care workplaces is constantly being created, recreated, negotiated and renegotiated through exploration of boundaries.

Research Question: How can the awareness of the co-production of boundary objects and boundaries shift the collaboration that occurs in primary care workplaces?

Methods: Multi-faceted methods were used to compare primary care collaborations across three time periods amplified by COVID-19 (January-August 2020) within interior British Columbia. First, 15 virtual semi-structured interviews with clinical, administrative, and executive informants were conducted to capture their collaborative experience. Second, discourse analysis of the Public Health Act, Public Health Orders and modelling. Phase three included member checking with the informants to discuss themes.

Results: This paper demonstrates the continual changing nature of collaboration as boundaries and boundary objects shifted. The findings highlight that different boundary and boundary object were co-produced across the three time periods. Examples of these changes include: (Pre-Wave 1) swallowing assessments, health service planning, and hallways; (Wave 1) PPE, cleaning, and crisis; (Post Wave 1) telehealth, funding, and communication.

Discussion: One limitation is that those who agreed to be informants may view collaboration positively. A delimitation was primary care services provided by the Nation were not included due to capacity from the Nation. Through member checking, informants felt this change in perspective on collaboration was useful however, were unclear how to apply it. In response, the researcher developed a series of exercises to support implementation.

Conclusion: By increasing awareness of shifting boundaries and boundary objects, healthcare professionals are better equipped to engage in collaboration. By better understanding how collaboration is co-produced this research could support primary care teams to deliver collaborative policy direction more efficiently.

Category 6: Rural and Remote Health

Breakout Room: 6

Presentation Time: 6:20 PM

Reagan Chicoine, Health and Social Development

Investigating the Impact of COVID-19 and Climate Change Hazards on Mental Health in Rural Communities

Chicoine, Reagan; Zinck, Reagan; Ferguson, Eric; Szostak, Carolyn; Banner-Lukaris, Davina; Fournier, Bonnie; Oelke, Nelly

Background: COVID-19 and climate change hazards (CCH) can adversely affect mental health (MH). Little is known about how COVID-19 and CCH impact individuals' MH in rural communities, or effective ways to address these changes. Historically, it has been identified that rural communities have inequitable access to resources; therefore, investigating the MH status of these communities is important given the increasing burden and overlap of CCH and COVID-19 stressors.

Objective: This study aims to identify the impact of CCH and COVID-19 on the MH in rural communities and identify interventions that could foster resiliency.

Methods: Using a mixed methods approach, surveys were distributed to Burns Lake, Ashcroft, Keremeos and other rural communities throughout British Columbia. Qualtrics survey links were distributed by convenience sampling through posters placed in communities, snowball sampling through emails, and REACH. The quantitative component measured MH status using the WHO-5 questionnaire, and other MH-related questions. The qualitative component included questions on MH status and invited participants to submit creative works that represent their MH and their experiences with CCH or COVID-19. Furthermore, semi-structured interviews were conducted via Zoom.

Results: Based on 162 survey responses from rural community members ranging in age from 16 to 84 years, 38% of participants reported being worried about their wellbeing, 64% reported concern for the wellbeing of their family or friends, and 66% reported concern for the well-being of their community. The average WHO-5 well-being score was 51.8 out of a maximum potential score of 100, with a score of 50 being the typical screening threshold for depression. The results from the qualitative portion show that common MH impacts are anxiety, depression, stress, economic health stress, hopelessness, and concerns for the future. Additionally, frequent suggestions for promoting resiliency were better access to mental health services, education, and communication.

Discussion: Results will be used to help facilitate deliberative dialogues, which will take place with community stakeholders to help implement changes. The results from this study will be used to identify key MH impacts in rural communities and potential future interventions to minimize adverse MH outcomes and foster resilience.

Breakout Room: 6

Presentation Time: 6:27 PM

Kendra Corman, Science

Exploring the Social Networks of Rural BC Adults 50 years and Older with Mental Health Concerns

Corman, Kendra; Paterson, Carley; Szostak, Carolyn

Introduction and Objectives: Social connections with friends or family enhance well-being. While researchers have investigated the social networks of older adults, little is known about the networks of rural adults 50 years and older with mental health concerns (MHCs). Given limited mental health-related resources in rural communities, reliance on social networks for support may be greater. This study explores the composition of these networks in order to enhance understanding of them and to improve their quality.

Methods: An online survey was developed to assess social networks and their relationship to participants' wellbeing, and distributed throughout BC using social media and REACH-BC. Current distress was assessed using the Depression Anxiety Stress Scale. Networks were mapped using a hierarchical mapping technique, which involves categorizing members of one's social network into three concentric circles depending upon emotional closeness. The UCLA Social Support Inventory was used to assess tangible (e.g., aid) and non-tangible (e.g., emotional) support. Preliminary analyses examine socio-demographics and social network characteristics.

Results: Individuals (N = 185) from six BC regions participated. Approximately 75% live in smaller communities (i.e., <5001). Diverse MHCs were reported, with anxiety (76.2%) and depression (75.1%) being the most common. On average, participants reported moderate levels of distress. Mean network size was 8.6 (range = 2-18). Within social networks, tangible support was low (M =2.26) while non-tangible support was moderate (M = 3.14). Future analyses will evaluate the number of people within each circle, relationship type, structural characteristics of networks (e.g., proximity, form of contact), and the association of these features with type of MHC.

Discussion and Implications: Despite considerable emotional distress, social support provided by participants' networks was reported to be low-moderate. Given the importance of social support for psychological well-being, the limited support described by participants may be contributing to their distress. Structural characteristics of the networks may account for differences in tangible vs. non-tangible support. For example, tangible support often involves in-person contact, whereas non-tangible support can be provided virtually. Our findings will facilitate development of resources designed to improve quality of relationships and well-being for those with MHCs and those who provide support.

Breakout Room: 6

Presentation Time: 6:34 PM

Katie Del Buono, Health and Social Development

A Program Evaluation of Carrier Sekani Family Services Mental Health Programs in Northern British Columbia

Del Buono, Katie; Hughes, Malcolm; Betkus, Georgia; Wells, Rachael; Holyk, Travis; Pawlovich, John; Oelke, Nelly D

Background: Mental health concerns continue to be a significant challenge for Indigenous populations who face greater disproportionate health inequities compared to other groups. Carrier Sekani Family Services (CSFS) provides comprehensive health and wellness services for over 10,000 individuals living in 11 different member First Nation communities in north-central British Columbia. Services and supports are founded on culturally safe care and utilize the life-cycle approach to wellness. CSFS want to ensure the services and supports provided are meeting the needs of their clients. Optimizing healthcare services for this population is essential to bridging health inequities related to mental health. Furthermore, Indigenous research must be founded on collaborative partnerships.

Objective: This project aims to better understand how CSFS Mental Health and Wellness Programs are meeting the needs of those they serve. The foundation for this project was an intentional and collaborative research partnership with CSFS.

Methods: The research was founded on a collaborative partnership with CSFS staff. Regular communication including email and electronic meetings were employed to ensure transparency and synergistic decision-making in the research process. The project used mixed methods to evaluate CSFS mental health services and supports. A rapid review was conducted to assess current best practice models of care for mental health services for Indigenous populations in rural and remote locations. An environmental scan of current CSFS services and supports was conducted using the CSFS website. Quantitative analysis of CSFS administrative data is being analyzed to assess the current utilization of services. CSFS staff and stakeholders will be recruited for qualitative interviews to assess perspectives on current services and supports. The data will be analyzed using interpretive descriptive design. The rapid review, environmental scan, and administrative data analysis will be explored regarding the contextualization they provide for the qualitative interviews and interpretive descriptive analysis.

Conclusion: Undertaking a program evaluation provides valuable insight into current successes and areas of improvement. This presentation will review how collaborative partnerships with Indigenous populations are an essential component of Indigenous health research. Prioritizing collaborative research partnerships with Indigenous populations is a key component of addressing health inequities and supporting evidence-informed decision-making.

Breakout Room: 6

Presentation Time: 6:41 PM

Lauren Eggenberger, Medicine

Enhancing Travel for Birth with an Escort Policy

Eggenberger, Lauren; Pertice Moffitt

Introduction: Travelling long distances to give birth outside their home communities is a reality faced by many women in the NWT. This process is termed maternal evacuation and comes with its own unique set of challenges. One such struggle is the lack of support women experience when leaving their community to give birth. Prior to 2017 the non-medical escort policy in the NWT stipulated that all women travelling for birth were not eligible for a paid escort and therefore had to travel alone to an often-unfamiliar location to access maternity services or, pay out of pocket to bring an escort with them. In 2017 this policy was changed to allow for one paid escort for each woman that was required to travel to give birth. Although research has explored the challenges faced by women when travelling for birth, no research has been conducted since this policy change, thus it is unclear what the impact of this new policy is on a women's birthing experience.

Research Question: What is the impact of the current NWT non-medical escort policy on the birthing experience of women from the NWT who must travel for birth?

Research Methods: This project utilizes a community based photovoice method which asks participants to take a photo that reflects their birthing experience. This is followed by a semi-structured interview with the mothers and their chosen escorts to explore topics including how they were informed of the eligibility for an escort, why they chose their escort and how their choice impacted their birthing experience. Finally, we will have a group interview with the participants to assemble their photos into themes.

Conclusion: Hopefully, the results of this project will be able to improve future medical travel and non-medical escort policies. This project is even more important now, as Yellowknife recently closed their maternity services for three months. This meant that the women who would normally travel from northern communities to Yellowknife and those from Yellowknife all travelled to Edmonton, AB for birth. This increased the number of women experiencing maternal evacuation and the impacts of the NWT's non-medical escort policy.

Breakout Room: 6

Presentation Time: 6:48 PM

Ashish Giri, Applied Science; Emily Mayzes-Kotulla, Science

Requirement Specification for a Makerspace for rural communities in British Columbia.

Giri, Ashish; Mayzes-Kotulla, Emily; Ronquillo, Charlene; Li, Eric; Rush, Kathy

Over 18% of Canadians are currently living in rural and remote areas. These residents have long experienced struggles in accessing affordable and inclusive health and wellness goods and services compared to their urban counterparts. Policy-makers, healthcare practitioners, academic researchers, social innovators, for-profit and non-profit stakeholders are now exploring the potential of adopting cutting-edge technologies and innovative design for promoting inclusive health for rural populations.

This study seeks to establish the conceptual and practical foundations to inform the development of a makerspace for health and wellness - a collaborative space where people can create, learn, explore, and share their ideas. The proposed makerspace aims to improve access, broaden participation, support diversity, and act as an “equalizer” for community stakeholders and social innovators to apply and advance knowledge.

To enable the appropriate equipping of a makerspace, we are conducting a requirements specification through case studies of three existing makerspaces that are currently servicing small cities and rural communities in Canada. Within these case studies, we are conducting interviews with key stakeholders, focus groups of current makerspace users, and collecting supporting documents related to the planning, implementation, and evaluation of these spaces. The questions addressed are regarding the conceptual and practical requirements to build a mobile makerspace that can support the exploration of inclusive and creative uses of technology. Our study also investigates makerspace users’ motivations, as well as the prioritization and processes involved for innovating these spaces. Further, the extent to which health and wellness have been targets of makerspace projects is considered.

In this presentation, we showcase preliminary findings of this ongoing study, future plans of the project, and share our experiences of taking part in a multidisciplinary research team.

Breakout Room: 6

Presentation Time: 6:55 PM

Livia Jonnatan, Science

Mobile Device Impacts on Physical and Mental Wellbeing during to the COVID-19 Pandemic

Jonnatan, Livia; Seaton, Cherisse; Hasan, Mohammad Khalad; Rush, Kathy; Li, Eric

Introduction: The COVID-19 pandemic has increased people's reliance on technology. Previous studies conducted before the COVID-19 pandemic explored mobile device usage behavior, its benefits, and drawbacks. However, little is known about mobile device use during the COVID-19 pandemic and its impact on physical and mental wellbeing. In addition, differences in rural and urban people's lifestyle may result in different mobile device usage and impacts.

Research Question: How has mobile device use impacted rural and urban participants physical and mental wellbeing during the COVID-19 pandemic?

Methods: We conducted an online survey in summer 2021 and recruited adults living in BC. We collected demographic information and physical and mental wellbeing associated with mobile device use. Participants' communities were categorized as being 'rural' or 'urban', based on the community classification framework by BC Ministry of Health (2015) which is based on population size and level of hospital care available. We report descriptive statistics and analyzed pre-post differences using paired sample t-tests and group differences using Mann-Whitney U tests.

Results: We collected and analyzed data from 465 adults (45% rural; 75% female; M age = 40.8 years). Results indicated that technology use was significantly higher during the pandemic (M = 8.35 hours) compared to prior (M = 6.02 hours), with urban participants experiencing a greater increase compared to rural ($p < .001$). Rural and urban participants reported using mobile devices during the pandemic to help manage their mental wellbeing, though urban participants reported greater use of a mobile device to feel better ($p < .001$), talk to others when feeling isolated ($p = .004$), and improve their mood ($p = .011$). Yet, urban participants reported encountering more physical discomfort ($p = .005$), visual disturbances ($p < .001$), and sleep disruptions ($p < .001$) than rural participants.

Discussion: Participants reported high use of mobile devices to support their wellbeing; however, they also reported detrimental physical effects, especially urban participants.

Conclusions/Implications: Our results can guide health care workers, researchers, and policymakers to take necessary actions such as promoting healthy smartphone usage (e.g., motivating exercise, limiting smartphone usage) in supporting adults' physical and mental wellbeing.

Breakout Room: 6

Presentation Time: 7:02 PM

Carley Paterson, Arts and Social Sciences

Being there: A qualitative exploration of support systems for rural adults 50 years and older with mental health concerns

Paterson, Carley; Oelke, Nelly; Szostak, Carolyn

Introduction: Support from social and personal connections is important for the well-being of adults 50 years and older with mental health concerns (MHCs; e.g., depression, anxiety, substance use). This support is particularly important for those who live in rural communities where professional help is limited. This study sought to understand the experiences and perspectives of family, friends, and co-workers who provide social/personal support to individuals 50+ with MHCs in rural BC communities.

Methods: Nine adults who met criteria were recruited through social media advertisements and REACH BC, and participated in a one-on-one interview. Interpretive descriptive methods were used. A thematic analysis was conducted using NVivo and interpreted using ecological systems theory.

Results: Three themes were identified: ‘makings of a deep connection,’ ‘behind the scenes of a relationship,’ and ‘pressure and burden of providing support.’ The first theme highlighted the components of the deep connection in these relationships, characterized by the importance of communication and its dynamic nature, as well as the importance of engaging in activity with or for each other. Gender differences regarding preferences for type of support were highlighted. Factors ‘behind the scenes’ of these relationships included participants’ personal responsibilities or their own experiences with MHC. These contributed to the third theme, feelings of pressure and burden. Factors that contributed to the sense of burden included a feeling that they were alone in providing support. Knowledge about MHCs (i.e., MHC literacy) eased the burden. Feelings of pressure and burden negatively impacted the deep connections. In contrast, motivations identified in the second theme (e.g., love and connection) contributed positively to relationships and, at times, helped to lessen the feelings of pressure and burden.

Discussion and Conclusion: These findings highlighted the consequences of mental health stigma within rural communities, including increased pressure on those providing support. In contrast, high levels of MHC literacy within support systems contributed to positive relationship dynamics and improved quality of mental health support. These findings inform recommendations made for health care professionals (e.g., involve support network in treatment) and future research (e.g., the development of interventions for the supporter to improve relationship quality and well-being).

Category 7: Student and Social Health

Breakout Room: 7

Presentation Time: 6:20 PM

Eric Ferguson, Arts and Social Sciences; Jaime-Lyn MacLeod, Science

Investigating the Mental Wellbeing of University Students Throughout an Academic Term

Ferguson, Eric; MacLeod, Jaime-Lyn; Szostak, Carolyn

Background and Objectives: University can be challenging as one tries to balance academic and social obligations, and manage financial stressors. Recent research demonstrates that undergraduate students report high levels of anxiety, stress, and depression.

To understand undergraduate students' distress, the 2021 Student Wellbeing Study assessed students at four time points in the fall term. This presentation focuses upon changes in distress, and examines the extent to which self-efficacy (SE; beliefs about one's abilities) and self-concept clarity (SCC; sense of knowing oneself) mitigates students' distress.

Methods: A stratified sample of UBCO undergraduate students were invited to complete four online surveys at key points of the Fall 2021 term: very beginning, 3-4 weeks into term, two weeks preceding Study Break, and the last two weeks of classes. Each survey included socio-demographic questions to characterize the sample and determine changes that occurred.

The Depression Anxiety Stress Scale (DASS) was used to assess emotional distress. Repeated measures Analyses of Variance (ANOVA) were conducted to evaluate changes in distress across the term. Measures of SE and SCC were included to evaluate the individual differences in these changes.

Results: Data of students who completed all four surveys were analyzed (N=262). The majority (72.7%) were women, with 80% of participants enrolled in four or more courses. Significant increases in stress, anxiety, and depression were observed across the term ($p < .05$). Stress and anxiety increased progressively, although only the changes from Survey I to IV were significant ($p < .05$). Significant increases in depression occurred at each timepoint ($p < .05$). By the end of term, depression, on average, was in the moderately severe range. Preliminary correlational analyses demonstrated that SCC and specific facets of Coping SE at the end of term were inversely correlated with increases in depression (Survey IV-Survey I).

Discussion: These results demonstrate that distress increases across an academic term. Hierarchical multiple regression will be used to evaluate further the nature of the observed increases in distress by considering the influence of socio-demographic variables, SCC, and SE. These findings will help universities develop more effective strategies to enhance student wellbeing and promote academic success.

Breakout Room: 7

Presentation Time: 6:27 PM

Dyuthi Dinesh, Arts and Social Sciences

Differing opinions: Understanding people's attitudes and beliefs about COVID-19 vaccines

Dinesh, Dyuthi; Brody, Keyara; Cho, Gloria; Szostak, Carolyn

Background and Objectives: Since March 2020, the COVID-19 pandemic has highlighted the polarization of public opinion regarding COVID-19 and associated vaccines. This polarization has contributed to a lack of collaborative action in containing the pandemic and prioritizing public health. The present study examines the extent to which people's beliefs about the pandemic and available vaccines are associated with their scientific literacy and use of social media.

Methods: The described research is part of the Differing Opinions: COVID-19 study. An online survey consisted of socio-demographic questions and validated measures of attitudes and beliefs about COVID-19 and associated vaccines. To determine the nature of individual differences in these beliefs, measures of health-related beliefs (including vaccine hesitancy), endorsement of conspiracy theories, political orientation, scientific literacy, and media use were included. Preliminary analyses examined the inter-relationships between scientific literacy, media use, and COVID-19 and vaccine beliefs.

Participants (N=862) were undergraduate students at the University of British Columbia, Okanagan campus. The majority identified as female (67%). First-year students accounted for 35% of the sample while other years accounted for 20-23% each.

Results: Over 95% of participants were fully vaccinated against COVID-19. Despite this high vaccination rate, participants had diverse opinions about the coronavirus and associated vaccines. Preliminary correlational analyses suggested that participants with greater scientific literacy, belief in science, and vaccine knowledge were more supportive of government mandates designed to curb the spread of COVID-19 (all p's<.001). Scientific literacy was inversely correlated with COVID-19 conspiracy beliefs (p<.001). Individuals with greater scientific literacy reported evaluating the credibility of the COVID-19 related information they were consuming (p<.001), and reported greater trust in scientists as a source of information about the coronavirus (p<.001). They were also less likely to consider social media news as accurate (p<.001).

Discussion and Implications: This study demonstrates the importance of scientific literacy and aspects of social media use in understanding people's opinions about the current pandemic. Hierarchical multiple regressions will be conducted to better understand the complex inter-relationships between COVID-19 related beliefs, scientific literacy, and social media use. Findings may help in developing more effective methods of scientifically communicating topics regarding public safety.

Breakout Room: 7

Presentation Time: 6:34 PM

Madeleine Frame, Arts and Social Sciences

Examining Perfectionism, Burnout, and Internalizing Symptoms in Individuals with and without Autoimmune Disease

Frame, Madeleine; Piercy, Jamie

Introduction: Autoimmune diseases represent numerous chronic illnesses that occur as a result of one's immune system responding to self-antigens. Individuals with chronic illness are especially vulnerable to internalizing symptoms and disorders, such as anxiety and depression. Despite this relationship being established in past research, it has rarely been examined through the lens of personality characteristics, namely perfectionism.

Objectives: This study is investigating the relationships between internalizing symptoms (anxiety, depression, burnout) and psychological traits (self-efficacy and perfectionism) in both healthy students and those with autoimmune illness. It is hypothesized that students with autoimmune diseases will score higher on the anxiety, depression, burnout, and perfectionism measures, with lower self-reported self-efficacy.

Methods: Participants (N = 270) were recruited using the SONA participant pool at UBC, Okanagan. Each participant completed an online questionnaire including demographics, the Patient Health Questionnaire-9, the Frost Multidimensional Perfectionism Scale, General Anxiety Disorder-7, and the Maslach Burnout Inventory – Student Survey. Participants also completed the PROMIS Self-Efficacy for Managing Chronic Conditions or an adapted daily life version, based upon their self-reported disease status.

Results: Sample demographics revealed that participants were predominantly female (n = 205; 76%), and between the ages of 19 and 20 (n = 126). In total, 21% (n = 57) of participants self-reported as having a diagnosed autoimmune disease. Group differences, between the autoimmune and no-disease control group, will be investigated using independent samples t-tests. Linear regressions will be used to assess the relationships between disease status, psychological traits, and internalizing symptoms. Exploratory analyses will investigate differences within the autoimmune group based on different body system involvement.

Conclusion: This project intends to replicate and extend research on autoimmune diseases and psychological health to include personality traits in a student population. This study aims to discern how autoimmune disease independently affects individuals' psychological experiences. Ultimately, these findings will inform clinical care and contribute to the design of preventative, targeted supports for those with autoimmune disease.

Breakout Room: 7

Presentation Time: 6:41 PM

Khushee Nair, Arts and Social Sciences

The Relationship between Test Anxiety and Self-Efficacy: Does Culture Play a Role?

Nair,Khushee; Piercy, Jamie

Introduction: Test anxiety is a type of performance anxiety characterized by distress experienced by people in testing situations. Approximately 25-40% of university students experience test anxiety, making it a prevalent impairment in school students. Test anxiety is an important factor that affects students’ academic performance, with research demonstrating an inverse relationship between test anxiety and self-efficacy. Self-efficacy, an observed psychological construct, is a self-assessment of how well or poorly the person believes they can cope with a given situation based on the skills they have. Although most research on this topic has been conducted in various countries and international contexts, the extant research does not highlight significant cross-cultural differences or how these relationships might differ in a multicultural country, such as Canada. Moreover, there is a clear gap in the literature regarding cross-cultural studies, which would highlight the similarities and differences in this relationship across cultures.

Objectives: This study aims to describe the impact of culture on the relationship between self-efficacy and test anxiety. Specifically, we will investigate whether self-identified culture moderates the relationship between self-efficacy and test anxiety in a sample of undergraduate students. Subsequently, the differences of this relationship between monocultural and multicultural families, and their immigration status will also be explored.

Method: 300 university students were recruited for this study using the SONA participation pool at UBC Okanagan. Participants filled out an online questionnaire regarding their demographics, including cultural and immigration status, outcomes including stress relating to exams, general anxiety, social supports, and self-efficacy for both academics and managing emotions.

Results: Preliminary findings reveal that participants are predominantly female (n = 210) and Caucasian (n = 171). There was a range of immigration status, such that, 33% of participants identified as third-generation or more Canadian, 22% of the sample were international students, and 17% were second-generation immigrants. Further analyses will explore demographic and psychosocial predictors of main outcomes, including stress-related to exams, anxiety, social supports, and self-efficacy, as well as the potential moderating role of culture on these relationships.

Breakout Room: 7

Presentation Time: 6:48 PM

Kierra Pritchard, Health and Social Development

Planning and Piloting a Farmers’ Market for UBCO Campus

Pritchard, Kierra; De Grandpre-Brown, Ayla; Rutledge, Kassidy

Introduction: Campus Health’s VOICE 5 research project explored the issue of student food security and ways to improve the campus food system. Students identified a campus farmers’ market as a priority to diversify the campus food system, increase food literacy, and increase social cohesion. Campus Health’s student food security team planned and piloted a farmers’ market.

Objective: To promote campus wellbeing and support a thriving campus food system that:

- Increase access to local, nutritious foods

- Increase social cohesion

- Is profitable for market vendors

- Provides vendor space to campus groups for community engagement

Methods: A proposal was developed in consultation with UBCO stakeholders and informed by Campus Health research and UBC strategic priorities. COVID-19 Safety Plans were developed according to Provincial, Interior Health, and UBCO orders. Market vendors were recruited through in-person and virtual methods. Market volunteers were recruited through the UBCO Life Newsletter and Job and Volunteer Board. Market enrichment tables were made available for campus groups to promote their work. Feedback was collected via a comment box and whiteboard. Verbal comments were noted and recorded. Volunteers estimated and recorded market attendance.

Results: COVID-19 presented implementation limitations due to unpredictable, ever-changing conditions. This led to low vendor interest and commitment as the risk of decreased sales and wasted resources were perceived as significant. COVID-19 regulations made an indoor farmers' market impossible. Regardless, three outdoor markets were hosted between September-November 2021. Each market had three vendors attracting approximately 150-200 attendees. Attendees’ feedback indicated the market supports a vibrant campus atmosphere and will increase access to local food. Vendors reported profitable sales and interest in future markets. Campus groups, including Campus Planning, Thrive, the Nutrition Education Centre, and Project Equifood secured tables at the market to share information and engage the campus community.

Conclusion: This pilot has accomplished the objective of contributing to campus wellbeing and a thriving campus food system. Market results signalled demand for a future full-scale market. Two more markets are anticipated to occur this spring. In the near future, Campus Health aims to make the UBCO farmers’ market a permanent staple on campus.

Breakout Room: 7

Presentation Time: 6:55 PM

Jaime-Lyn MacLeod, Arts and Social Sciences; Eric Ferguson, Arts and Social Sciences

Understanding early semester distress in undergraduate students: The impact of work and predictability of work schedule

Macleod, Jaime-Lyn; Ferguson, Eric; Szostak, Carolyn

Background and Objectives: Recent research has suggested that most Canadian university students experience high levels of distress in their daily life. Moreover, this distress (e.g., anxiety, depression, and stress) is reported by undergraduate students shortly into the fall semester. This presentation is part of the larger 2021 Student Wellbeing Study, which is looking at the experiences of UBCO undergraduate students throughout the Fall term. The present research examines students' distress early in the term and evaluates the impact of work status and predictability of work schedule on their distress.

Methods: A stratified sample of UBCO undergraduate students was invited to participate in the 2021 Student Wellbeing Study. This presentation focuses upon students who completed the first two surveys (n=651). The majority identified as female (71%) and cisgender (95%). Participants completed an online survey at the beginning (i.e., 08-31/09-10) and shortly into (i.e., 09-25/10-08) the term. Distress was assessed using the Depression Anxiety Stress Scale and individual differences were evaluated.

Results: Repeated measures analyses of variance revealed that significant increases in anxiety, stress, and depression levels (all p's < .05) occurred within the first 3-4 weeks of classes. To determine if work status and predictability of work schedule influenced the observed increase in distress, mixed model analyses of variance were conducted on the Depression subscale. Neither the interaction between Work Status and Time nor the main effect of Work Status was significant (p's > .78). As expected, the main effect of Time was significant (p < .001). The interaction between Work Predictability and Time was significant (p < .05). Participants with a predictable work schedule reported lower levels of depression at Time 1; however, at Time 2, their levels of depression had increased and were comparable to those with non-predictable work schedules. Similar analyses will be conducted for the other DASS subscales.

Discussion: These findings suggest that working per se does not impact students' distress. While there are initial benefits of having a predictable work schedule, the benefits are short-lasting. Consideration of these findings will help universities in the development of effective resources designed to support their students, emotionally and academically.

Breakout Room: 7

Presentation Time: 7:02 PM

Elana Wood, Applied Science; Sonali Kuber, Arts and Social Sciences

Student Substance Use Support During COVID-19

Kuber, Sonali; Wood, Elana; Cates, Jordyn; Knox, Lisa; Feddersen, Melissa; Hamilton, Casey; Bottorff, Joan; Airth, Lauren

Introduction: Nationally, young people increased their substance use during COVID, and felt stigmatized for doing so, especially through the lens of intersectionality. The Voice Campus Health project at the University of British Columbia Okanagan (UBCO) engaged stakeholders (e.g., students, staff, faculty), and found these trends on their campus. Subsequently, the Harm Reduction Team (HaRT) addressed social, substance use, and addictive behaviour needs by creating and delivering education and partnering with the Student Recovery Community (SRC). The SRC is created by students and made for students at all stages of addictive behaviour recovery. It is the first group of its kind in Canada, and was founded at UBC Vancouver.

Objectives: 1) to raise awareness about substance use health and how to support healthy socialization, 2) to provide students with resources, and 3) to provide an inclusive space for people in recovery from addictive behaviours.

Methods: HaRT hired an SRC peer coordinator for UBCO in August 2021. Throughout Fall 2021, HaRT conducted four in-person, peer-led, interactive “Party 101” workshops hosted by Residence Life. Topics included: lower-risk substance use, overdose prevention, intersectionality in party culture, mental health, and resources. Simultaneously, the SRC offered weekly, online groups. Workshops and groups were advertised through social media, posters, e-mails, and meetings. The number of attendees was recorded and informal feedback was gathered through conversations and emails. Workshops and groups were open to all students, no referral necessary.

Results: Workshops engaged over 120 people and requests were made for future workshops. Biases surrounding substance use were prevalent among students; workshop presenters adjusted their delivery to address these biases. The method of delivery benefited from a community atmosphere. After the workshops started, an additional 3 UBCO students/month joined SRC groups. Students reported wanting more in-person interaction.

Conclusion: The workshops hosted by HaRT demonstrated an interest in lower-risk substance use and socialization. Additionally, SRC attendance demonstrates the importance of supporting the entire spectrum of substance use harm reduction. By hiring the SRC peer coordinator, campus engagement with substance use recovery conversations have increased. HaRT plans to hold dialogues to better understand the impacts of these services.

Category 8: Virtual and Digital Health

Breakout Room: 8

Presentation Time: 6:20 PM

Michelle Yang, Medicine

Qualitative evaluation of older adults participating in a Community Outreach teleheAlth program for COVID education and Health promotion (COACH)

Yang, Michelle; Clayton, Cam; Harris, Devin; Pelletier, Chelsea; Schmidt, Julia; Zwicker, Jill G.; Sakakibara, Brodie

Background: Chronic diseases are prevalent in Canada's elderly population (≥65 years). Positive health behaviours (e.g., physical activity, healthy diet) are critical for the management of chronic diseases (e.g., stroke, heart disease). However, novel coronavirus (COVID-19) prevention strategies of quarantining, social isolation, and physical distancing may compromise one's ability to manage their health and engage in daily activities, possibly increasing the risk of adverse health events. The Community Outreach teleheAlth program for Covid education and Health promotion (COACH) program has demonstrated an increase in health promoting behaviours, but little is known about participants' experiences in participating in the program.

Objectives: To describe (1) chronic disease prevention and management strategies of older adults (≥65 years of age) during COVID-19; and (2) participants' experience in COACH sessions delivered by medical students at the University of British Columbia.

Methods: The program entailed six telehealth sessions over two months that focused on health coaching, behaviour change, and COVID education. After completing COACH, twenty-four COACH participants (n = 24) were invited to participate in semi-structured interviews that were conducted through Zoom videoconferencing. Interview questions focused on how participants managed their own health before and during COVID-19. Qualitative description was the guiding methodological framework. Interviews were transcribed verbatim and analyzed thematically.

Results: Participants' mean age was 73.4 years (58% female) with 75% reporting two or more chronic conditions (e.g., stroke, heart disease, coronary artery disease, diabetes, heart attack). Three themes described participants' prevention and management strategies, including: i) having a purpose for optimizing health; ii) using internal self- control strategies; and iii) leveraging external support strategies. COACH further supported participants during COVID-19, as represented through coach interactions as well as knowledge and skill development.

Conclusion: Findings suggest that older adults engage in internal self-control strategies and external support means to manage current chronic conditions and promote health and well-being. COACH served as further external support as older adults were managing their health during COVID-19. Health professional program students have a potential role in health promotion and in assuming the role of coach in telehealth promotion programs for older adults.

Breakout Room: 8

Presentation Time: 6:27 PM

Vanessa Lo, Health and Social Development; Jay Jang, Science

Immersive technology application for collaborative healthcare training

Lo, Vanessa; Krishnamurthy, Jayaraman Rohith; Jang, Jay; Milani, Abbas; Hasan, Khalad Mohammad

Introduction: Due to the COVID-19 pandemic, the use of online learning has increased, and as a result, students in the healthcare field are finding it challenging to learn practical clinical skills online. Along with strict time limitations in the labs, there is inadequate time allotted to practice these foundational skills. Additionally, there is a global scarcity of medical supplies, and manufacturers are prioritizing hospitals currently, leaving facilities such as schools and training programs with fewer supplies to utilize for educational purposes.

Over the past few years, the use of augmented and virtual reality technology has increased exponentially. Its use in medical training has emerged as a high-tech solution for enhancing healthcare education and has led to many groundbreaking developments, prototypes, and applications.

Objectives: Inspired by this advancement, we created a mixed reality training solution. With mixed reality, physical and digital objects co-exist in a way that enables interactivity between the two. The objectives of this project are 1) determine whether this platform is effective as a supplement to physical lab time in enhancing knowledge and consolidation of clinical skills and 2) to utilize the platform to decrease costs by reducing the amount of medical supply usage in training labs.

Methods: We used Unity engine to build a universal windows platform application to run on Microsoft Hololens that uses Photon Network Engine and WebRTC to give instruction to trainees over the network for medical training using holograms. Students can use the application to practice the skill(s) independently without instructors' presence as a supplemental tool in addition to the current in-person labs. As a demonstrative example, we utilized the assembly of an intravenous infusion pump as a skill to be learned by student users.

Discussion: Traditional training methods are limited to lectures and in-person demonstrations while mixed reality devices can enhance user interaction. It also reduces cost, while simultaneously increases accessibility and repeatability.

Conclusion: We believe this solution will enhance the quality of students' training experience and enable educators to make the drastic shift to implement disruptive technology in the training of future healthcare professionals.

Breakout Room: 8

Presentation Time: 6:34 PM

David Shifflett, Arts and Social Sciences; Dawson Penner, Science

Leveraging the health equity expertise of community nurses

Shifflett, David; Penner, Dawson; Chau, Shirley; Li, Xiaoxiao; Ronquillo, Charlene E

Introduction: Previous research has shown that unintentional biases against vulnerable populations can lead to worse outcomes in their health care. Nurses can embed unintentional biases that they hold about their patients into their notes about these patients. The unavoidable use of these notes in the computer programs that help nurses allocate health care can exacerbate these biases and can consequently contribute to unhealthy outcomes for vulnerable populations. However, few studies have looked into how nurses' notes about their patients can affect the ensuring of equitable health for these vulnerable populations.

Objectives: The current study will investigate how nurses recognize their biases, how they define health equity, and how they ensure it, including through their note-taking about patients. These insights into their thinking will help create a dictionary of less biased ways that nurses can describe their patients.

Method: The participants in the current study will provide these insights during one-on-one qualitative interviews over Zoom. These participants will be 30 community health nurses who work in the Vancouver Coastal Health authority or the Interior Health authority. Community health nurses witness how their patients live at home and therefore are particularly aware of the most consequential social determinants of health for each patient's pursuit of health equity. This study will recruit participants through posts on social media by the BC Rural Health Network and by a voluntary professional organization for nurses, Nurses and Nurse Practitioners of British Columbia. Snowball sampling of these participants' colleagues will then supplement this recruitment. A computer program, Descript, will automatically transcribe these interviews. Grounded theory will then inform the analysis of these transcripts. Grounded theory is an alternative to the traditional model of the scientific method that instead lets data inform the construction of a theory.

Results and Discussion: This study is currently in progress.

Conclusions: This study could find that some nurses might not understand their biases, health equity, or ways that they can ensure health equity. The less biased dictionary from this study will feed into a less biased artificial intelligence that could help predict unhealthy outcomes for vulnerable populations before these outcomes occur.

(Truncated at 350 words)

Breakout Room: 8

Presentation Time: 6:41 PM

Amané Halicki-Asakawa, Arts and Social Sciences

Mobile App-Delivered Motivational Interviewing for Individuals on an Eating Disorder Clinic Waitlist: Pilot and Feasibility Study

Halicki-Asakawa, Amané; Libben, Maya

Introduction: Eating disorders (EDs) are life-threatening mental illnesses with serious health consequences. Despite having the highest mortality rate of any mental disorder, individuals with EDs are far less likely to access treatment compared to those with other mental health problems due to various barriers (e.g., long wait-lists, scarcity of treatment centres, low motivation for change, and high rates of treatment dropout). The COVID-19 pandemic has further exacerbated these issues, with reports of increased rates of EDs, longer wait-times, and decreased motivation for ED recovery. Motivational interviewing (MI) is a psychological intervention method that is effective in addressing many of the treatment issues associated with EDs including resistance to change and treatment dropout. Furthermore, brief MI interventions, administered prior to the onset of formal ED treatment, have been shown to improve overall clinical outcomes. Mobile-phone apps have been suggested as a cost-effective way to deliver such interventions. Despite their potential, there have yet to be any studies examining app-based MI to target EDs.

Objectives: The following project aims to adapt, pilot test, and examine the feasibility and acceptability of MI-Coach, a widely-available MI mobile app, for individuals on waitlists for ED treatment. The app is self-directed, and consists of several video modules and exercises walking individuals through the MI intervention.

Methods: Thirty participants with a range of diagnoses (e.g., anorexia nervosa, bulimia nervosa, binge eating disorder) will be recruited from ED clinic waitlists in British-Columbia and invited to use the app as frequently as desired for a one-month duration. Measures of clinical profiles, ED severity, and motivation for change will be examined before and after use of the app. In addition, participants' perceptions of the app's ease of use, perceived usefulness, and quality will be examined.

Results: As this study is ongoing, results will be reported at the end of the data collection period.

Discussion and Conclusions: This study has the potential to transform ED service delivery while simultaneously providing tangible psychological support to its participants.

Breakout Room: 8

Presentation Time: 6:48 PM

Soumyaa Subramanium, Arts and Social Sciences

Impact of Social Media Reports about Suicide on People's Attitudes

Subramanium, Soumyaa; Hussey, Rachel; Szostak, Carolyn

Background: Media guidelines have been created to encourage responsible reporting of deaths by suicide in order to reduce stigma and copy-cat suicides. Specifically, reporters are encouraged to not sensationalize the death (e.g., dramatic language), and to include educational information and resources. The available guidelines were developed for traditional media (e.g., newspapers). Social media is, however, becoming the primary means for obtaining news and information. Recent research found that popular social media news sources inconsistently comply with the available guidelines. Despite evidence that compliance with guidelines by print media reduces suicide-related stigma, research concerning the impact of social media reports on attitudes is limited.

Objective: The present study was designed to determine the effects of social media articles concerning a specific death by suicide and compliance with guidelines on attitudes about suicide. We hypothesized that reading a guideline-compliant article that included educational information would decrease stigmatizing attitudes.

Research Methods: The sample (N=254) consisted largely of female UBCO undergraduate students (78%) between the ages of 17-24 years old (93%). Participants completed two online surveys separated by a week. The baseline survey determined participants' attitudes prior to reading a selected article. Participants were randomly assigned to read a sensationalistic or non-sensationalistic article that included educational information or not. After reading the assigned article, participants' suicide-related attitudes were assessed using self-report questionnaires.

Results and Implications: Preliminary mixed model analyses of variance of stigma-related data did not yield any significant results. However, articles with educational information were more likely to be shared than those without ($p = .025$). There was a trend ($p = .077$) for those who read articles with educational information to be less likely to glorify/normalize suicide afterwards.

While small effect sizes were expected, the limited significant differences may reflect the small sample size and the limited nature of the manipulation.

Given that suicide is the second leading cause of death in youth, it is vital to understand the factors that contribute to suicide-related stigma. The results suggest that the inclusion of psychoeducational information can be a mitigating factor. Further research is needed to promote socially responsible reporting of deaths by suicide.

Breakout Room: 8

Presentation Time: 6:55 PM

Nadine Widjaja, Science; Ella Bannon, Health and Social Development

Using Artificial Intelligence to assess performance of fine motor and upper-limb skills in health and disease

Widjaja, Nadine; Bannon, Ella; Gopalakrishnan, Sowmya; Holliday, Parres; Komisar, Vicki; Kraeutner, Sarah N

Introduction: Canadian stroke survivors experience long-term motor impairments; however, interventions that promote and track motor recovery often require bulky and expensive equipment not accessible from home. To address the issue, our study examines the ability of a machine-learning analysis system, DeepLabCut (DLC), to accurately track movements. DLC has been validated to track accurate movements in animal species; however, tracking movements in humans have not been validated.

Objectives: Our current research aims to accurately track motor behavior in natural environments with a markerless motion analysis system and consumer-grade cameras.

Hypothesis: We hypothesized that this new technology would accurately gather kinematic data compared to touch-screen based systems.

Methods: Here, we examined DLC's accuracy in its ability to characterize movement patterns through the following steps:

1. Recorded participants' hand movements during a tracing session using a consumer-grade camera as well as its screen trajectories.
2. Manually tagged the participants' movements in the training group (N = 3) using DLC to create a model that will later be used for other participants.
3. Processed the model and the remaining participant videos (N = 3), DLC group, to Sockeye, the UBC supercomputer.
4. Obtained the x- and y-coordinates (DLC trajectories) of the hand movements of participants in the DLC group, based on the model that we have created.
5. Compared the x- and y- coordinates between the DLC trajectories and touch-screen trajectories of the participants in the DLC group. The error between the two trajectories is calculated to assess DLC's accuracy.

Discussion and Conclusion: Our current study compared the DLC trajectories with manual tagging and found similar movement patterns with its screen trajectories after accounting for time, camera angle, and sampling points. We are currently running the model with Sockeye to get the machine-learning trajectories for assessing its accuracy. Our findings will offer important implications in accessible rehabilitation for stroke survivors. First, they may demonstrate that an individual's movements can be accurately tracked with consumer-grade equipment, enabling methods to track the progression of motor recovery from home. Moreover, by providing an accurate, marker-less method, we can extend our research to sports and surgical skills.

Breakout Room: 8

Presentation Time: 7:02 PM

Michelle Yang, Medicine

Experiences of trained medical student coaches delivering a Community-Outreach teleheAlth program for COVID education and Health promotion (COACH)

Yang, Michelle; Singh, Gurkaran; Clayton, Cam; Harris, Devin; Pelletier, Chelsea; Schmidt, Julia; Zwicker, Jill G.; Sakakibara, Brodie

Background: The student-delivered Community Outreach teleheAlth program for COVID education and Health promotion (COACH) is a 2-month intervention aimed to promote health behaviours and facilitate self-management in community-dwelling adults with chronic conditions during times of quarantining, social isolation, and physical distancing. COACH was delivered by undergraduate medical students who underwent training on COACH program components, health coaching and behaviour change methods, virtual health delivery, and chronic disease management.

Objective: To describe students' experiences as health coaches in the COACH program.

Methods: This study used a qualitative descriptive approach with data collected from student coaches (n = 19). Participants engaged in a 45-to-60-minute semi-structured interview conducted via one-on-one Zoom video- conferencing calls. Interview questions focused on students' experiences delivering COACH, their understanding of various health-related topics (e.g., chronic care, virtual health, health promotion), and possible impacts on their beliefs and future practice. Interviews were transcribed verbatim and analyzed via inductive thematic analysis.

Results: Most (74%) of the participants were female with an average age of 25.6 years. Most participants (58%) were from visible minority populations, and 42% administered COACH in suburban/rural areas. Three main themes emerged from our thematic analysis, including: (1) exploring opportunities for knowledge and skill acquisition (i.e., learning virtual health, client-centered care and chronic care strategies); (2) developing clinical perspective and acumen (i.e., developing deeper understandings of chronic care, overcoming and growing from challenges faced during coaching, and becoming interested in areas of chronic care); and (3) learning to appreciate relationship- based patient care (i.e., becoming a health motivator and appreciating the building of rapport). Furthermore, emerging themes were also found to represent the six domains of the Canadian Medical Education Directors for Specialists (CanMEDS) framework (Theme 1: scholar and health advocate; Theme 2: professional and collaborator; Theme 3: leader and communicator).

Conclusion: Findings suggest that COACH supported the development of knowledge, skill, and confidence in medical school students in areas of health promotion, virtual care, and chronic disease management. COACH also helps to inform future student-led health interventions, as it gave students opportunities to develop interest and appreciation that they may use in clinical, relationship-based patient care.

10 Minute Presentations

Presentation Time: 7:20 PM

Liisa Wainman, Medicine

Acute Intermittent Hypoxia Improves Orthostatic Tolerance in Chronic but not Acute Spinal Cord Injured Rats

Wainman, Liisa; Ahmadian, Mehdi; Ainslie, Philip; Foster, Glen; West, Christopher

Introduction: Spinal cord injury (SCI) causes orthostatic intolerance due to disrupted sympathetic input to the heart and vasculature following injury. A novel strategy shown to enhance motor function below the injury is acute intermittent hypoxia (AIH; exposure to brief periods of low oxygen). While AIH is known to improve control over motor systems in incomplete cervical SCI, cardio-autonomic responses to AIH after SCI are unknown. In able-bodied individuals, AIH increases blood pressure (BP), improves orthostatic tolerance (OT), and heightens sympathetic activity. In incomplete SCI, intact neural pathways regulating sympathetic nerve activity suggest that AIH may increase sub-lesional sympathetic activity, thus improving cardiovascular function.

Purpose: Previous work has demonstrated that the response to AIH is sensitive to time post-injury, therefore the purpose of this project is to investigate whether AIH improves OT in rats following acute (2 weeks) and/or chronic (4 weeks) high-thoracic SCI. We believe AIH will improve OT more in chronically versus acutely injured rats.

Methods: 12 Wistar rats underwent T3 300 kdyn SCI. At 14 (n=6) or 28 (n=6) days post-SCI rats were tracheotomized, ventilated and arterial catheterization was performed to assess BP. Rats were subjected to lower body negative pressure (LBNP; recorded with manometer) to decrease mean arterial pressure (MAP) by 5 and 10 mmHg for 1-min. Rats were exposed to isocapnic AIH (10x1-min $FIO_2=0.10$ separated by 2-min of $FIO_2=1.00$; targeting a $PaCO_2$ of 40 mmHg). LBNP was repeated 90 minutes post-AIH, the expected peak response. Blood gases were measured pre- and post-AIH. A mixed-design ANOVA was performed to examine effects of time post-SCI (group) and AIH (treatment) on change in box pressure required to decrease MAP by -5 and -10 mmHg.

Results: There was a significant group*treatment interaction for the -5 mmHg ($p=0.011$) and -10 mmHg LBNP stage ($p=0.017$). Post hoc comparisons demonstrate that in chronic SCI the box pressure required to drop MAP by -5 and -10mmHg was increased by 41±16% ($p=0.009$) and 46±22% ($p=0.079$) versus pre-AIH, respectively, implying improved OT.

Conclusions: We demonstrate that AIH has the capacity to improve OT in a rodent model of SCI in a chronic, but not acute setting.

Presentation Time: 7:35 PM

Brian Hayes, Medicine

Towards an optimal integration of family physicians into the post-cancer treatment pathway in BC's interior: A mixed methods study

Hayes, Brian D; Young, Hannah; Taki, Alissa; Samper, Sofia; Pandher, Satvir; Loader, Alissa; Bennett, Erica; Brears, Sarah; Atrchian, Siavash; Voss, Christine

Background: The rising rates of cancer diagnoses and survival across Canada are leading to a growing population of patients requiring specialized long-term care to tackle treatment side effects and monitor for disease recurrence. In British Columbia (BC), Family physicians (FPs) are increasingly relied upon to manage the survivorship care for these patients, but limited research has been conducted to evaluate how the present infrastructure works in predominantly-rural regions like Interior Health (IH).

Objective: To assess the experience of physician stakeholders who participate in FP-led post-cancer care in IH, and explore means to improve the delivery of survivorship care by FPs in IH.

Methods: A convergent mixed-methods approach was used to assess physicians' experiences with and attitudes towards FP-led post-cancer care with regards to the four most prevalent cancers in IH; breast, lung, colorectal and prostate. Surveys were mailed to all registered, office-based FPs (n=943) and oncologists (ONC, n=39) in IH. Simultaneously, a sample of FPs (n=13) and ONCs (n=9) from rural and urban communities across IH participated in semi-structured 20-min interviews via telephone. Between-physician differences in survey responses were assessed via chi-square tests in R. In-depth interview responses underwent thematic analyses.

Results: Response rates for the survey were 94.6% for ONC (n=37/39) and 25.4% for FPs (n=230/943). FPs and ONC generally agreed that care of breast and colorectal cancer survivors falls within the scope of FPs (FP=8 1.2-85.4%, ONC=77.8-100%), but that FPs lack the knowledge to manage the aspects of post-cancer care without support (FP = 60.5-77.0%, ONC = 58.8-86.7%). Some respondents identified inadequate communication networks between FPs and ONCs (FP=38.2-47.5%, ONC=52.6-60%). These data were further elaborated on through the themes from qualitative analysis: 1) FP-led survivorship care is effective for the IH region, but dependent on information from ONCs and the cancer complexity, 2) Barriers such as insufficient communication, information exchange, and FP resources limit the care being provided, 3) Suggested solutions were published FP-guidelines for major tumor sites, improved discharge summary structure and more continuing education opportunities.

Conclusion: Through a mixed-methods approach we identified physician-experienced limitations and strengths of FP-led post-cancer care in IH and explored possible solutions.

Presentation Time: 7:50PM

Brookelyn Koersen, Science

The Co-development of Indigenous Community-led Culturally Safe Telediabetes/Obesity Care in BC's Interior

Josewski, Viviane; Vrtar-Huot, Arlene; Taylor, Jayne; Kurtz, Donna; McGregor, Roseanna; Cutts, Mary; Koersen, Brookelyn; Phillips, Anna; Michaud, Vicki; Norris-Bebek, Sheila; Terbasket, Edna; Camille, Carol; Manning, Karmin; Watson, Jackie-Ellen; Drouin, Lexea

Introduction: Representing most Indigenous Peoples in Canada, urban Indigenous Peoples experience poorer diabetes/obesity care and outcomes than the general population due to ongoing colonialism, racism, and discrimination. Culturally safe and relevant diabetes/obesity care can reduce barriers and improve outcomes; yet remain lacking. In a related Indigenous diabetes/obesity study, multiple urban/rural Friendship and Métis Center (FC/MC) communities in the BC Interior identified a need for culturally safe, community-led interventions addressing this gap. One priority was to co-develop telediabetes/obesity programs that include Traditional and Western approaches.

Research Question: Can interdisciplinary telediabetes/obesity clinics co-developed, implemented, and evaluated in partnership with urban Indigenous communities provide culturally safe care for BC Interior urban Indigenous Peoples?

Methods: Using Community-Based Participatory Action and Indigenous Methodologies, FC/MC staff, community research liaisons (CRLs), community advisory teams (CATs), Elders, Knowledge Keepers, Healers, Interior Health Authority (IHA) providers, UBC researchers, and trainees collaboratively co-design, implement, and evaluate telehealth clinics. Information is gathered and shared through Talking Circles, Community Gatherings, and a structured, mixed-method survey, inclusive of open-ended questions and Likert-type items. CRLs administer the survey after each clinic to assess participants' experiences. Qualitative data is analyzed using thematic grouping and quantitative data using frequency distributions. Local Elders will facilitate Talking Circles including participants from each FC/MC community.

Preliminary Results: Project collaborators co-created an accredited 8-hour evidence-informed diabetes/obesity management workshop. Six providers, including physicians, nurse practitioners, and registered dieticians (recruited by word of mouth) attended this workshop in November 2020. Four providers rated the workshop excellent and two above average. Physicians, IHA certified diabetes educators, and CRLs from three communities have invited 12 (10 female, 2 male) participants to 20 clinic appointments (11 initial, 9 follow-up visits). Post-clinic surveys indicated that all participants felt safe and listened to, that their questions were answered, and that they knew next steps for their self-care. Healers will provide group sessions with clinic participants and with health providers to learn how to work together.

Conclusions: Results indicate that Indigenous community-led telehealth clinics improve the cultural safety and relevance of diabetes/obesity care for urban Indigenous Peoples. Further work will include in-depth process/outcome evaluation and sustainability plans.