

Research and Practice Virtual Showcase 2020

Monday, October 26 2020

Policy, Prevention, and Social Determinants of Health

Name	Program	Title of Abstract
1 Michelle Amri	PhD Social and Behavioural Health Sciences	<u>The World Health Organization's approach to equity: an investigation into the Urban Health Equity Assessment and Response Tool (Urban HEART)</u>
2 Dorothy Apedaile	MPH Epidemiology	<u>The Underreporting of Workplace Violence at Six Ontario Hospitals</u>
3 Devon Bowyer and Adriana Gonzalez	MPH Indigenous Health	<u>Selected Indigenous Child Welfare Policies and Protocols amid the COVID-19 Pandemic Led (ICW C-19)</u>
4 Rachel Field	MPH Social and Behavioural Health Science	<u>"Toward Health Equity Guide" Interview Project: Involving Document Users to Support Knowledge Translation and Capacity Building at PHAC</u>
5 Keltie Hamilton	MPH Epidemiology	<u>Goals of Care in Canada: A Translational Approach to Care Designations</u>
6 Sabahat Javaid	MScCH Family and Community Medicine,	<u>The Use of Email and Secure Messaging between Residents and Patients at St. Michael's Family Medicine Residency Program</u>
7 Ashley Lau	MPH Epidemiology	<u>Integration of Movement Breaks in the undergraduate classroom: Keeping active and improving wellbeing</u>
8 Alifa Siddiqui	MPH Social and Behavioural Health Science	<u>Impact of COVID-19 on Displaced Populations and Migrants Around the World: A Health Promotion Student's Perspective</u>
9 Mehathie Sivakumaran	MPH Social and Behavioural Health Science	<u>Sri Lanka Migration And Diabetes Study: Diabetes Education Tip Sheets</u>
10 Calum Thompson	MPH Epidemiology	<u>Estimating bicycling injuries preventable by separated bicycling infrastructure – case study of Bloor-Danforth, Toronto</u>
11 Tianru Wang	MPH Epidemiology	<u>Predictors of Greater Vaping Dependence and Higher Vaping Frequencies among Canadian Youth and Young Adult over 12-Month</u>
12 Thilaxcy Yohathanas and Sterling Stutz	MPH Indigenous Health	<u>Translations for Our Nations: Addressing the Indigenous Language Gap in COVID-19 Health Communication</u>

Name: Michelle Amri

Program: PhD Social and Behavioural Health Sciences

Project Title: The World Health Organization's approach to equity: an investigation into the Urban Health Equity Assessment and Response Tool (Urban HEART)

Research or Practice: Research

Key Words: Global Health, Policy, Social Determinants of Health

Abstract: The World Health Organization (WHO), as the most prominent global health institution as a specialized agency of the United Nations, has expressed concern for health equity as part of its mandate, "the attainment by all peoples of the highest possible level of health". However, there is a lack of clarity around the WHO's fundamental definition and conceptualization of equity. Through drawing on the WHO's Urban Health Equity Assessment and Response Tool (Urban HEART) as an illustrative case, the aim is to determine how the WHO operationalizes equity in practice. Preliminary findings suggest there is no consistent understanding of what the goal of Urban HEART is. My work on Urban HEART has direct implications for practice: not only can the findings be applied to other global health work that seeks to improve equity, but the WHO is planning to reinstate Urban HEART. My research would be immensely beneficial in guiding these plans. Further, the findings yield an important consideration for global and public health policy and practice more broadly: the need to clarify objectives around equity (e.g. because how equity is defined determines the work undertaken and the populations served).

Name: Dorothy Apedaile

Program: MPH Epidemiology

Project Title: The Underreporting of Workplace Violence at Six Ontario Hospitals

Research or Practice: Research

Key Words: Occupational Health, Policy, Prevention

Abstract:

Objective: The objective of this analysis was to understand how workers at Ontario hospitals report workplace violence (WPV) that they experience, identify socio-demographic and event-related factors related to reporting, and identify reasons for not reporting WPV.

Methods: All workers at six large Ontario hospitals were invited to participate in a survey regarding WPV. This analysis focuses on a subsample of participants who experienced WPV in the past 12 months and provided detailed information about the most serious WPV incident (N=482). Reporting behaviour and reasons for not reporting were summarized using descriptive statistics. Chi-squared analysis was used to compare reporters to non-reporters on sociodemographic and event-related characteristics.

Results: Most workers did not report their most serious WPV incident (67%). The most common reason for not reporting WPV was feeling that it "wasn't the type of incident that needs to be reported" (60%). Assaults were significantly more likely to be reported than threats or attempted assaults ($p<0.01$), as were incidents that resulted in physical injury ($p<0.01$). In addition, workers were less likely to report an incident if they perceived it to be unintentional ($p<0.01$). Nurses were more likely to report WPV than workers in non-nursing occupations ($p=0.03$).

Conclusion: Across these six Ontario hospitals, two thirds of workers did not report their most serious WPV incident. Our results also show that reported WPV incidents differ significantly from unreported WPV incidents. In order to improve WPV reporting, hospitals should ensure that all reports are taken seriously and that workers understand the full scope of incidents that need to be reported.

related policies and protocols. Our research team will work with a supporting Elder to produce a video that features Indigenous academics and experts from the four countries participating in facilitated discussions regarding policy recommendations and best practices when responding to pandemics in the context of Indigenous child welfare. This project will work to demonstrate why culturally-safe spaces for narrative-based sharing contributes to redressing colonial systems of oppression towards Indigenous youth in the care of child welfare within current and future health crises. Further, the video will be shared widely with Indigenous leaders, policy makers, students, and academics from the four countries via the Waakebiness-Bryce Institute's website, highlighting this project's focus on the importance of knowledge sharing, reciprocity, and relationality within the field of COVID-19 policy responses and Indigenous child welfare.

Names: Devon Bowyer and Adriana Gonzalez

Program(s): MPH Indigenous Health

Project Title: Selected Indigenous Child Welfare Policies and Protocols amid the COVID-19 Pandemic (ICW C-19)

Research or Practice: Research

Key Words: Indigenous Health, Policy

Abstract: Indigenous children, especially those within the care of child welfare, are at an increased risk of experiencing significant health, social, and legal effects due to not only the virus itself, but the accompanying government-mandated COVID-19 containment efforts in place (UNICEF, 2020). The COVID-19 pandemic is thus demonstrating in profound ways the necessity for Indigenous experiences and perspectives to be incorporated into pandemic responses, particularly when addressing the needs of Indigenous children and youth within the child welfare system. In support of this necessity, the United Nations issued an international call for contributions to a study that highlights Indigenous voices and their perspectives on the impacts of COVID-19 on Indigenous populations (UHRC, 2020).

Given this international call, our research project aims to understand the efficacy of global responses to COVID-19 in the Indigenous child welfare context through a cross-country comparison of Canada, the United States, Australia, and New Zealand's COVID-19 related policies and protocols. Our research team will work with a supporting Elder to produce a video that features Indigenous academics and experts from the four countries participating in facilitated discussions regarding policy recommendations and best practices when responding to pandemics in the context of Indigenous child welfare. This project will work to demonstrate why culturally-safe spaces for narrative-based sharing contributes to redressing colonial systems of oppression towards Indigenous youth in the care of child welfare within current and future health crises. Further, the video will be shared widely with Indigenous leaders, policy makers, students, and academics from the four countries via the Waakebiness-Bryce Institute's website, highlighting this project's focus on the importance of knowledge sharing, reciprocity, and relationality within the field of COVID-19 policy responses and Indigenous child welfare.

Name: Rachel Field

Program: MPH Social and Behavioural Health Science (Health Promotion)

Project Title: "Toward Health Equity Guide" Interview Project: Involving Document Users to Support Knowledge Translation and Capacity Building at PHAC

Research or Practice: Practice

Key Words: Knowledge Translation, Policy, Social Determinants of Health

Abstract: For my practicum, I worked with the Health Equity Integration Team (HEIT) to improve the application of Sex- and Gender-Based Analysis + (SGBA+) at The Public Health Agency of Canada (PHAC). SGBA+ is an analytical tool used in the federal government to ensure the consideration of diversity and intersectionality in programs and policies. One of the training resources on SGBA+ at PHAC is called Toward Health Equity: The SGBA+ Guide. This guide provides an overview of SGBA+, associated concepts, and a case study. I was part of a team tasked with updating this document to make the guide more applicable to current agency priorities. However, in revising the guide it became clear that there was a significant gap in understanding what document users needed. To make this guide as user-friendly and relevant as possible, I suggested that we conduct interviews with key informants throughout the agency to gather feedback and identify barriers to SGBA+ application. This project was part of a Knowledge Translation (KT) process that involved employees from many different roles and divisions at PHAC. The interviews allowed readers to identify the guide's strengths, weaknesses, and gaps in clarity and content. Improving SGBA+ application at the federal public health level is important, because it is the agency's way of applying a health equity lens to the work that they do. This project was also significant because it interrupted the standard process of KT, which follows a linear path and only integrates user feedback at the end. Instead, this project promoted an iterative process, involving document users throughout the development and revision of the guide to create a final product that is more tailored to their needs. Clear and effective communication is crucial to public health practice; this project is an example of how to achieve that by incorporating constructive feedback.

By ensuring continuity in GOC between provinces, it would allow for continuity of care, improved patient care, and respect of patient wishes. The implementation of universal GOC guidelines would also allow for an opportunity to improve knowledge of care designation planning among physicians across Canada and create a unique education platform for palliative care specialists to contribute to.

Overall, the current GOC policies and fragmented system in place does not serve Canadians well and needs to be improved to meet current needs during the COVID-19 pandemic. This novel translational approach to healthcare policy should be evaluated for future use due to its likelihood to improve patient outcomes.

Name: Keltie Hamilton

Program: MPH Epidemiology

Project Title: Goals of Care in Canada: A Translational Approach to Care Designations

Research or Practice: Research

Key Words: Ethics, Knowledge Translation, Policy, Prevention

Abstract: This presentation will disseminate a scoping review conducted in August of 2020 looking at the Goals of Care designations across provinces within Canada. Goals of Care (GOC) are currently different in every province, and with COVID-19 forcing families to quarantine together across provincial borders, it could lead to medical error upon a hospital admission. Currently a large majority of Canadian physicians believe GOC conversations are meant to be had in a palliative setting, and not viewed as a preventative measure to ensure quality care across the life span. By addressing the cross-province disparity and implementing a new cross-Canada GOC based on the most current recommendations, Canada could be one of the few countries worldwide to create a universal GOC.

Utilizing the data collected within the scoping review along with a comparison of GOC data inside countries with similar healthcare systems we have developed a proposal for Universal GOC to be employed Canada wide. This new GOC policy will allow for clear communication across provinces and eventually reduce administrative costs associated with current provincial GOC knowledge translation and implementation.

By ensuring continuity in GOC between provinces, it would allow for continuity of care, improved patient care, and respect of patient wishes. The implementation of universal GOC guidelines would also allow for an opportunity to improve knowledge of care designation planning among physicians across Canada and create a unique education platform for palliative care specialists to contribute to.

Overall, the current GOC policies and fragmented system in place does not serve Canadians well and needs to be improved to meet current needs during the COVID-19 pandemic. This novel translational approach to healthcare policy should be evaluated for future use due to its likelihood to improve patient outcomes.

Name: Sabahat Javaid

Program: MScCH Family and Community Medicine

Project Title: The Use of Email and Secure Messaging between Residents and Patients at St. Michael's Family Medicine Residency Program

Research or Practice: Research

Key Words: Policy, Medical Education, E-communication

Abstract:

Background: The use of email and secure messaging between physicians and patients is increasing in frequency. P PHowever, residents lack formal training in e-communication, patient privacy and other confidentiality issues associated with it. There is also a paucity of assessment tools and faculty feedback regarding this practice.

Objective: The objective is to investigate use of email and secure messaging between patients and residents at St. Michael's family medicine residency program and analyze educational constructs, facilitators, and barriers relevant to this practice.

Methods: Three cross-sectional surveys were conducted at St. Michael's family medicine residency program in 2018-2020. Each resident in postgraduate year 1 & 2 received an email inviting them to respond.

Results: The prevalence of residents using email or secure messaging is increasing (47% in 2018 vs 81% in 2020). Over 86% of FM residents used hospital/clinic computers in 2020 but the proportion of residents using personal computers rose to 60% that year. A prominent barrier appears to be the 'potential for inappropriate use by patients', which was cited as 'fairly' or 'very' important at rates of 85.3%, 86.9%, and 73.68% in 2018, 2019 and 2020, respectively. 76.4% and 56.52% of residents cited lack of consistent advice/guidelines as a barrier in the years 2018 and 2019, respectively. The perception of support has risen (33.3% residents reporting supervisors as 'very' or 'somewhat' supportive versus 57.8% in 2020). The majority reported 'rarely' or 'never' getting feedback/guidance from their supervisors.

Conclusions: Our study found an increase in the use of email and secure messaging. Residents are increasingly using their personal computers which likely reflects the increase in virtual models of care. Residents have concerns regarding the appropriate use of such messaging by patients. Lack of supervision may pose a risk of patient confidentiality/privacy breach. There is a need for curricular re-design and faculty development around this practice. year. A prominent barrier appears to be the 'potential for inappropriate use by patients', which was cited as 'fairly' or 'very' important at rates of 85.3%, 86.9%, and 73.68% in 2018, 2019 and 2020, respectively. 76.4% and 56.52% of residents cited lack of consistent advice/guidelines as a barrier in the years 2018 and 2019, respectively. The perception of support has risen (33.3% residents reporting supervisors as 'very' or 'somewhat' supportive versus 57.8% in 2020). The majority reported 'rarely' or 'never' getting feedback/

Name: Ashley Lau

Program: MPH Epidemiology

Project Title: Integration of Movement Breaks in the undergraduate classroom: Keeping active and improving wellbeing
Research or Practice: Research

Key Words: Prevention, Physical Activity, Well-Being

Abstract:

Objectives: Insufficient physical activity is a public health concern. Traditional schooling has long periods of sedentary behaviours, leading to disengagement and has impacted students' wellbeing in the classroom. Adding physical activity into the classroom has the ability to mitigate these negative effects of sedentary behaviour in university students and improve their wellbeing. The objective of this study was to examine the effect of 3-Minute Movement Breaks (video and instructor-led stretching, aerobics, dance, and mindfulness breaks) on student emotional, physical, social, and psychological wellbeing in diverse undergraduate classrooms.

Methods: Undergraduate classes were randomized to receiving one or two Movement Breaks per class for the duration of one semester, or control. Students in both the intervention and control arms completed pre-post questionnaires which assessed sociodemographic, engagement, and multidimensional wellbeing variables. Multivariable logistic regression adjusting for sociodemographic variables and baseline wellbeing was used to model the relationship of having higher levels of various dimensions of wellbeing (defined as a rating of 3, 4 or 5 out of 5) by intervention group and by participation level.

Results: This study included 1,338 students from 19 classes, across 3 semesters, and all three University of Toronto campuses. After adjusting for confounders, those who participated in Movement Breaks consistently (9-12 weeks out of 12 weeks) had increased odds of having higher levels of emotional (adjusted odds ratio, aOR 3.41, 95% confidence interval, CI 1.92, 6.06), physical (aOR 3.67, 95% CI 1.99-6.77), social (aOR 2.35, 95% CI 1.22-4.53), and psychological wellbeing (aOR 1.83, 95% CI 1.06-3.16) compared to control groups.

Conclusions: Implementation of Movement Breaks in the university classroom improves wellbeing in undergraduate students. Future work should identify strategies to encourage students to consistently participate in Movement Breaks throughout the semester for maximal benefit.

Name: Alifa Siddiqui

Program: MPH Social and Behavioural Health Science (Health Promotion)

Project Title: Impact of COVID-19 on displaced populations and migrants around the world: A health promotion student's perspective

Research or Practice: Practice

Key Words: Global Health, Knowledge Translation, Social Determinants of Health

Abstract: My practicum placement was completed with the Dalla Lana School of Public Health Centre for Global Health. I have contributed to the work of a team of student and faculty members developing a review of the literature and environmental scan to explore the impact of the COVID-19 pandemic on migrant populations. I worked with colleagues to design and run a search strategy on the Medline (OVID) and Scopus bibliographic databases. The findings showed that crises including the COVID-19 pandemic act as magnifying lens and expose existing inequities within society as the impact of the pandemic is not equally felt by all population groups. Migrant populations are particularly impacted due to their intersectional identities that marginalize and disempower them and severely impact their health outcomes. Even though migration is the engine of the globalized economy and migrant workers make significant contribution to agricultural and economic prosperity, their precarious living conditions have worsened during the pandemic and they are being excluded from relief packages and income support. Furthermore, racism and xenophobia is fuelling hostility and prejudice towards migrants as governments are controlling the movement of migrants by closing their borders to asylum seekers and existing refugee camps are having outbreaks due to cramped and overcrowded living conditions and limited healthcare access. It is evident that migrant populations are very diverse groups that are facing unique challenges and thus, require distinct forms of protection particularly during this pandemic. The results of this work are currently being summarized in a manuscript that recognizes how determinants of health impact the health and well-being of migrants, the need to develop a road map for recovery using a health equity lens, and inform health policies. To eradicate COVID-19, it is imperative to leave no one behind including migrant populations and re-evaluate how inequities are addressed globally.

Name: Mehathie Sivakumaran

Program: MPH Social and Behavioural Health Science (Health Promotion)

Project Title: Sri Lanka Migration And Diabetes Study: Diabetes Education Tip Sheets

Research or Practice: Practice

Key Words: Chronic Disease, Prevention, Social Determinants of Health

Abstract: Diabetes is a chronic and complex disease that is influenced by many factors such as social, economic, cultural and historic factors. Tamil migrants from Sri Lanka living in the Greater Toronto Area have a higher rate of type 2 diabetes compared to other Canadians. Among South Asian migrants in Ontario, Tamil migrants from Sri Lanka have the highest rate of type 2 diabetes compared to migrants from India, Pakistan and Bangladesh. The South Asian Health Research Hub (SAHRH) at the Dalla Lana School of Public Health developed health education tip sheets for the Tamil community living in the Greater Toronto Area for the prevention and management of type 2 diabetes. The tip sheets provide an overview of diabetes, the management of diabetes in a culturally relevant manner, and the factors that affect diabetes care along with resources and supports. These tip sheets are essential for addressing the impact of the social determinants of health on South Asian populations through the delivery of health education to a priority population in Ontario being impacted by diabetes at a disproportionate rate.

Name: Calum Thompson

Program: MPH Epidemiology

Project Title: Estimating bicycling injuries preventable by separated bicycling infrastructure – case study of Bloor-Danforth corridor, Toronto

Research or Practice: Research

Key Words: Environmental Health, Injury, Policy

Abstract:

Background: Cycling is associated with several direct health benefits, lower commute times, and lower traffic volume. Despite these benefits, cycling as a share of transportation in Toronto remains low and injuries disproportionately high per kilometre. However, if safer cycling infrastructure were installed injury burden should fall and bicyclist ridership would increase. Increasing the number of bicyclists is important to improve physical health and reduce pollution. Additionally, following COVID-19 public transit ridership is expected to fall. Encouraging individuals to bicycle may be important in reducing spread of COVID-19 and protecting new riders.

Objectives: To estimate injury and fatality burden along the Bloor-Danforth corridor, one of the street segments under study for safer cycling infrastructure, and then apply a relative risk estimate for the effect of safer cycling infrastructure, such as cycle tracks.

Results: Safer cycling infrastructure would confer a significant reduction in the number of injuries and fatalities along Bloor-Danforth. Installation of cycle tracks would reduce injury burden from over 17/year to ~2/year. Additionally, other forms of cycling infrastructure (e.g., cycle lanes) would also confer a significant reduction in injuries and fatalities. Finally, the reduction in injury burden will be felt for years to come, as infrastructure will continue to benefit bicyclists.

Conclusion: These results suggest installing cycle lanes in Toronto would see a considerable reduction in injuries. However, the range of benefit is impacted by the type of infrastructure and permeability of barriers installed. Additionally, this benefit would continue to be seen for years to come.

Name: Tianru Wang

Program: MPH Epidemiology

Project Title: Predictors of Greater Vaping Dependence and Higher Vaping Frequencies among Canadian Youth and Young Adults over 12-Month

Research or Practice: Research

Key Words: Mental Health and Addictions, Policy, Prevention

Abstract:

Background: The prevalence of electronic cigarette use has doubled among Canadian youth and young adults in recent years. However, little is known about the predictors of greater vaping nicotine dependence. This study identifies variables associated with greater Penn-State Electronic Cigarette Dependence Index (PS-ECDI) scores and higher vaping sessions per month (SPM) among this population.

Methods: Data were drawn from a longitudinal study that recruited 1048 Canadian participants aged 16-26 in 2018. Quota sampling was used to ensure enough regular e-cigarette users were recruited. The current study restricted analyses to the 459 participants who were baseline vapers and have completed both the baseline and 12-month follow-up surveys. Multiple linear regression analyses were employed, with the use of the best subset modelling strategy to obtain reduced models.

Results: Baseline vapers who were ≥ 18 and married or cohabiting, had used other tobacco products, had 30 or more puffs per vaping session, started vaping at an earlier age, vaped to quit/reduce smoking, and had used a disposable cigarette-like vaping device and/or an advanced box or tubular device and/or a pod vape in the last 6-month were associated with greater PS-ECDI scores compared to their respective counterparts. Additionally, baseline vapers who were ≥ 18 and married or cohabiting, had used cannabis, had 30 or more puffs per vaping session; vaped to reduce/quit smoking and/or because friends vape; had used a pod vape in the last 6-month were more likely to have higher SPM at the 12-month follow-up compared to their respective counterparts.

Conclusion: 11% of the participants were classified as high vaping nicotine dependence and 42% of the participants had increased their SPM over 1 year. The findings provide targets for vaping reduce or cessation programs and potential policy change in the regulation and sales of pod vape.

Names: Thilaxcy Yohathanan and Sterling Stutz

Program(s): MPH Indigenous Health

Project Title: Translations for Our Nations: Addressing the Indigenous Language Gap in COVID-19 Health Communication

Research or Practice: Practice

Key Words: Indigenous Health, Global Health, Knowledge Translation

Abstract:

Purpose: The availability of culturally safe and plain-language resources is necessary to reduce the spread of COVID-19 for Indigenous communities around the world. Translations For Our Nations is an initiative addressing these resource gaps, making available COVID-19 health resources in Indigenous languages on the web. The project began in April 2020 as a result of the Indigenous COVID-19 Health Partnership launched by Victor A. Lopez-Carmen, a Dakota and Yaqui medical student, Harvard Medical School) and co-founded by Sterling Stutz and Thilaxcy Yohathanan, (MPH-Indigenous Health at the University of Toronto), and Sukhmeet Singh Sachal (medical student, University of British Columbia).

Methods: Translators from Indigenous communities around the world signed up to participate in the project via a GoogleForm in April 2020. Over 100 Indigenous translators and community members in regions (South America, Asia, Africa, Europe, North America, and the Pacific) were provided the 5 English language source materials reviewed by physicians and Indigenous youth leaders. Translators submitted their translated documents via email and on September 1, 2020 the website [Translations4OurNations.org](https://www.translations4ournations.org) was launched where the translated documents can be accessed and downloaded with more translations accepted on a rolling basis.

Results: Translations for our Nations has published COVID-19 health resources in 40+ Indigenous languages from around the world. The website also includes photos and text submissions from community members speaking to the importance of culturally-specific COVID-19 health information disseminated directly to communities in local languages and dialects.

Implications: Indigenous Nations have the right to access vital health information in their mother tongue. This project is led by and designed for Indigenous youth and Indigenous community members to empower individuals and communities to make informed choices regarding their health and exposure risks, and decrease the risk of COVID-19 transmission in Indigenous communities around the world.