

Dalla Lana School of Public Health Research and Practice Showcase Program

2020

Monday October 26th - Friday October 30th

PhD Students:

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).

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Name: Jen Goldberg

Program: PhD Social and Behavioural Health Sciences

Project Title: Ontario Midwives' Attitudes Towards Sexual and Gender Minority People: A Cross-Sectional Survey

Research or Practice: Research

Key Words: Gender identity/sexual orientations (LGBTQ), Maternal and Child Health

Abstract: This study aims to explore Ontario midwives' attitudes towards sexual and gender minority people (SGM). The need for this research is demonstrated by: (1) published literature showing midwives' attitudes do shape the care experiences of lesbian women; (2) the lack of literature on midwives' attitudes towards all SGM, more broadly. Understanding what shapes attitudes might help ensure midwives are able to provide quality, inclusive care to all SGM, which could play an important role in reducing health disparities of SGM and improve their health outcomes. As primary care providers, midwives are well positioned to be effective partners public health initiatives to reduce the disparities in health of SGM.

The primary hypothesis is Ontario midwives demonstrate positive attitudes towards SGM. A secondary hypothesis is no significant difference exists between the attitudes of rural and urban midwives. This study will be a mixed mode, cross-sectional survey of midwives in Ontario, developed within the framework of community-based participatory research in partnership with SGM and midwives. The population is approximately 808 registered midwives who are Association of Ontario Midwives members. To achieve a 98% confidence interval with a 1% margin of error, the sample size would need to be N=471, estimating the prevalence of positive attitudes to be 70% (N=330). A response rate of 60% would result in 484 surveys. Participants will be recruited through midwifery practices. Data collection will utilize Dillman's approach of multiple contacts. Data analysis will include: measurement of the attitudes of Ontario midwives towards SGM; assessment of differences in midwives' care of SGM; and assessment of differences in attitudes toward SGM based on demographic data. Results will be stratified by demographic and self-identity variables.

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Name: Kristie Serota

Program: PhD, Social and Behavioural Health Science

Project Title: Improving end-of-life conversations in the post-MAiD era

Research or Practice: Research

Key Words: Ethics, Occupational Health, Policy

Abstract:

Legalizing medical assistance in dying (MAiD) has transformed how palliative and hospice care providers (PHCPs) engage in end of life conversations with patients and their loved ones. We do not currently know how PHCPs in the Toronto area have experienced this tremendous shift, and what challenges they have faced in transforming their practice to accommodate MAiD conversations. We must understand the unique challenges faced by PHCPs so that we can improve the education, resources, and supports available to these essential healthcare providers. We also must ensure that Canadians receive the highest quality care at the end of life, whether or not they choose to pursue a medically assisted death. To examine these unique challenges, I interviewed 22 PHCPs to document their experiences of engaging in end-of-life conversations in the post-MAiD era. Participants included physicians, nurses, social workers, and other allied health professionals employed in faith-based and secular institutions. Their personal beliefs about MAiD varied widely; some identified as conscientious objectors, while others actively engaged in MAiD assessment and provision. Initial thematic analysis revealed that challenges include translating the federal legislation into medical practice; navigating inefficient institutional policies and role ambiguity; developing conversation techniques to share MAiD information with patients and families in a balanced way that is informative yet uncoercive; and, navigating the ethical and organizational issues that arise when patients with declining capacity pursue MAiD. Finally, PHCPs shared personal experiences of burnout, emotional weight, and stigma. Understanding how these factors impact the work and lives of PHCPs allows us to develop targeted strategies to improve the

institutional policies surrounding MAiD conversations, referrals, and procedures, as well as decrease the negative personal and emotional consequences of engaging in end-of-life conversations in the post-MAiD era.

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Name: Jessica Wong

Program: PhD Epidemiology

Project Title: The effect of low back pain on health care utilization and costs: A population-based matched cohort study on the health system burden of low back pain

Research or Practice: Research

Key Words: Chronic Disease, Non-Communicable Disease

Abstract:

Objective: We assessed the effect of self-reported low back pain (LBP) on health care utilization and costs in a population-based sample of Ontario adults.

Methods: We conducted a population-based matched cohort study of Ontarian respondents aged ≥ 18 years of Canadian Community Health Survey (CCHS) from 2003-2012. CCHS data were individually linked to health administrative data to measure health care utilization and costs up to 2018. We propensity-score matched (hardmatched on sex) adults with self-reported LBP to those without LBP, accounting for sociodemographics, health-related, and behavioural factors. We evaluated LBP-specific and all-cause health care utilization and costs from healthcare payer perspective adjusted to 2018 Canadian dollars. Poisson and linear (log-transformed) models were used to assess healthcare utilization rates and costs.

Results: After propensity-score matching, we identified 36,806 pairs (21,054 for women, 15,752 for men) of CCHS respondents with and without LBP (mean age 51 years; SD=18). Compared to propensity-score matched adults without LBP, adults with LBP had two times the rate of LBP-specific visits (women: rate ratio [RR] 2.06, 95% CI 1.88-2.25; men: RR 2.32, 95% CI 2.04-2.64), 1.1 times the rate of all-cause physician visits (women: RR 1.12, 95% CI 1.09-1.16; men: RR 1.10, 95% CI 1.05-1.14), and 1.2 times the costs (women: 1.21, 95% CI 1.16-1.27; men: 1.16, 95% CI 1.09-1.23). Incremental annual per-person costs were higher in adults with LBP versus those without (women: \$395, 95% CI \$281-\$509; men: \$196, 95% CI \$94-\$300), corresponding to \$532 million for women and \$227 million CAD for men annually in Ontario.

Public health impact/implications: Adults with LBP had considerably higher health care utilization and costs compared to adults without LBP. These findings provide the most recent, comprehensive, and high-quality estimates of the health system burden of LBP to inform healthcare policy and decision-making. New strategies to reduce the substantial burden of LBP are warranted.

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Name: Stephanie Ziembicki

Program: PhD Occupational Health and Environment

Project Title: Current diesel engine exhaust exposure in the Ontario construction industry

Research or Practice: Research

Key Words: Occupational Health, Prevention

Abstract:

Background. Diesel engine exhaust (DEE) is a known carcinogen and a common occupational exposure in Canada, particularly within construction. The use of diesel-powered equipment in the construction industry is widespread, but little is known about DEE exposures and occupational disease in this work setting. The objective of this study was to characterize and identify key determinants of DEE exposure at construction sites in Ontario.

Methods. Diesel particulate matter (DPM) measurements were taken from workers employed on seven infrastructure construction worksites in Ontario. Full-shift personal air samples were collected from workers using a constant-flow pump and SKC aluminum cyclone with 37-mm quartz fiber filters in an open-faced cassette. Samples were analyzed for elemental carbon (EC), a surrogate of DEE exposure, following NIOSH method 5040. Exposures were compared to recommended health-based limits, including the Dutch Expert Committee on Occupational Safety (DECOS) limit ($1.03\mu\text{g}/\text{m}^3$ respirable EC) and the Finnish Institute of Occupational Health (FIOH) recommendation ($5\mu\text{g}/\text{m}^3$ respirable EC). A determinants of exposure model was constructed.

Results. In total, 126 DPM samples were collected, ranging from <0.47 - $52.58\mu\text{g}/\text{m}^3$ with a geometric mean (GM) of $4.23\mu\text{g}/\text{m}^3$ (geometric standard deviation (GSD)=3.05). Overall, 44.8% of samples exceeded the FIOH limit, mostly within underground worksites (93.5%), and 88.8% exceeded the DECOS limit. Underground workers (GM= $13.20\mu\text{g}/\text{m}^3$, GSD=1.83) had exposures approximately 4-times higher than below grade workers (GM= $3.56\mu\text{g}/\text{m}^3$, GSD=1.94) and 9-times higher than aboveground workers (GM= $1.49\mu\text{g}/\text{m}^3$, GSD=1.75). Work grade, enclosed cabs, and seasonality were identified as the major determinants of exposure.

Implications. This study provides a better understanding of current DPM exposure in Canadian construction. Most exposures were above recommended health-based limits, signifying a need to further reduce DPM levels in construction. These results can inform a hazard reduction strategy including a new occupational exposure limit and targeted intervention/control measures to reduce DPM exposure and the burden of occupational cancer.

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Master's Students:

Name: Safa Ahmad

Program: MPH Epidemiology

Project Title: The Effect of Pod-type Device Use and Nicotine-related Characteristics on Future Vaping Behaviour in a Sample of Canadian Youth and Young Adults

Research or Practice: Research

Key Words: Mental Health and Addictions, Prevention

Abstract:

Background: A national study conducted between 2017 and 2019 found that the prevalence of vaping 20 days or more in the past month increased among Canadian youth, who may be at risk of developing nicotine dependence and smoking habits as a result. Pod-type devices, which facilitate inhalation of higher nicotine concentration than other devices, became popular after nicotine-based e-cigarettes legally entered the Canadian market in May 2018.

Objective: To determine if baseline nicotine-related factors and pod use affect future vaping behaviour in a sample of Canadian youth and young adults.

Design and Participants: Sample of 1048 participants aged 16-24 years recruited in March 2018 via social media and a recontact list from a provincial tobacco-related initiative. Online surveys were conducted in March of 2018 and 2019 (n=668).

Methods and Results: Multinomial logistic regression models were used to examine the effect of each potential risk factor on persistence in and frequency of vaping (moderate (>8 days in past month) and almost daily/daily (>23 days)) at follow-up. Each model was adjusted for demographic factors and baseline vaping frequency, substance use, and smoking status. Past-6-month pod use was more strongly associated with almost daily/daily than with moderate vaping (aRRR = 3.89, 95% CI = 1.82–8.31, $P < 0.001$) and with persistent than with discontinued vaping at follow-up (aRRR = 4.42, 95% CI = 2.05–9.54, $P < 0.001$). Frequent, rather than infrequent, baseline nicotine use was more strongly associated with almost daily/daily than moderate vaping (aRRR= 2.50, 95% CI= 1.23–5.00, $P < 0.001$).

Conclusions: Baseline nicotine e-cigarette use and pod use within six months of follow-up, adjusted for demographic and substance use-related factors, were associated with more frequent vaping at follow-up in our sample of young Canadians. Mitigating vaping-related risks in this population warrants attention to their access to nicotine-based e-cigarettes.

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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.

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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.

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Name: Bonnie Cai

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

Project Title: Patient and Family Engagement: Co-designing care in British Columbia's Mental Health and Substance Use System.

Research or Practice: Practice

Key Words: Knowledge Translation, Mental Health and Addictions, Policy

Abstract: British Columbia Mental Health and Substance Use Services (BCMHSUS) provides mental health services, education, and health promotion initiatives to people with mental health and substance use issues across the province of BC. As a Project Coordinator in the Patient and Community Engagement portfolio, I performed a variety of work to support patient and family engagement under the newly created Patient Engagement Framework. Engaging patients and families as active participants and co-designers of their own care is an important component of patient-centred care that improves healthcare quality, health outcomes, and overall experiences of care at a system level. To work towards this goal, I developed a trauma-informed policy and procedure for BCMHSUS on patient and family engagement to serve as a guideline for giving patients and families a voice in the design and delivery of their mental health care. I also drafted two patient engagement playbooks called Managing Conflict and Respecting Emotions and Engaging Mandated and Incarcerated Patients, which focus on barriers and solutions to engaging patients in vulnerable circumstances. Moreover, I worked with provincial stakeholders to write the annual report for the BC Partners, which is a collaborative mental health promotion partnership between BCMHSUS and 7 provincial organizations with different mental health

and substance use specialties (e.g. BC Schizophrenia Society, The Mood Disorders Association of BC, Canadian Institute for Substance Use Research, etc.). I also performed a literature review of the evidence supporting family engagement in patient- and family-centred care, and I made infographics and other visual designs to translate research and knowledge in visually appealing ways. Overall, my practicum helped me contribute towards advancing public mental health by valuing patients' knowledge, skills, and lived experience in the health system and working on a variety of initiatives to promote mental health in the province.

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Name: Claire Carnegie

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

Project Title: Developing Resources for Staff and Adapting Programing During COVID-19 at Fred Victor

Research or Practice: Practice

Key Words: Knowledge Translation, Marginalized Populations

Abstract: Fred Victor is an organization that supports those experiencing poverty and homelessness in Toronto. As a practicum student in the Health Promotions department at Fred Victor, I gained experience working on health promotion projects and was able to work directly with the community. Throughout the practicum, I worked on several projects to adapt Fred Victor's services during COVID-19. First, I worked to develop a resilience toolkit for Fred Victor staff. COVID-19 has led to higher levels of stress. This prompted Fred Victor to develop tools to support their staff. I designed a toolkit that instructs managers on how to promote resilience in their supervision sessions and team meetings. This toolkit provided information on what resilience is, as well as practical actions that managers can take to promote resilience in staff. This project involved knowledge translation to convey the research on resilience to Fred Victor staff in an accessible way. Additionally, I worked to support the development of online peer support groups. Typically, Fred Victor runs weekly in-person peer support groups for community members. However, due to COVID-19, these groups had to move to an online format. I helped facilitate this transition by developing a guide for facilitating online group programming. This guide included information on the best platforms to run online programming, how to create a safety agreement, and best practices for facilitating the group. I then conducted outreach to community members to ask for their input on the format and content of the groups. These projects are important to public health as they work to meet the public health goal to improve quality of life by promoting and encouraging healthy behaviours. These projects played an important role in promoting the health of Fred Victor staff and clients during COVID-19 by providing them with support and tools to manage their mental health.

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Name: Amy Chang

Program: MPH Epidemiology

Project Title: Examining prevalence of cancer risk factors across Ontario for the Ontario Cancer Profiles tool

Research or Practice: Practice

Key Words: Non-Communicable Disease, Prevention, Cancer Risk Factors

Abstract: The Ontario Cancer Profiles is an interactive dashboard for the public containing population-level cancer statistics created by Ontario Health (Cancer Care Ontario). The tool contains data on cancer burden, cancer screening measures, and cancer risk factors by Local Health Integration Network (LHIN) and Public Health Unit (PHU). It can be used for health system planning, measuring health systems performance, monitoring the impact of interventions, and to help identify new areas of research. There were 9 new modifiable cancer risk factors proposed to be included in future updates of the dashboard. The proposed risk factors include: access to care, active transportation, binge drinking, alcohol abstinence, inadequate fruit consumption, inadequate vegetable consumption, sedentary behavior, secondhand smoke exposure, and sun safety. My practicum consisted of two main objectives: to conduct a literature search on the association between the proposed risk factors and cancer and to determine the prevalence of exposure of the identified risk factors in Ontario using 2015 to 2017 CCHS data. I performed a literature search to examine current evidence linking each proposed risk factor with cancer risk to determine the inclusion or exclusion of the indicator in the analysis. An analysis was performed with the selected variables in CCHS, each indicator was age-standardized, and both standardized and crude ratios of individuals engaging in selected indicator activities were calculated. The results were examined for reliability using the produced coefficient of variation values. The estimates for each risk indicators allowed for the identification of target population that may be at higher risk of developing cancer due to greater exposure to the risk factors. They also serve as useful predictors for areas of improvement in regions with a high prevalence, such as healthy living within the community, and a guide to implementing preventative measures, screening, or treatment plans that may have been lacking.

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Name: Katherine Charness

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

Project Title: Pet-Friendly Shelters and Health Equity Planning for the Durham Region

Research or Practice: Research

Key Words: Marginalized Populations, Policy, Social Determinants of Health

Abstract: I completed my practicum placement at the Durham Region Health Department on the Health Policy and Equity Team. The role of the team is to provide policy expertise, advise, and support to meet

Regional and Provincial requirements and to develop policy and health equity initiatives. This past summer I worked on two projects that supported these objectives.

The first was a collaborative project between the Health and Social Services departments to assess the need and feasibility for a pet-friendly shelter in the Durham Region and outline the key health and policy considerations. Currently, there are no pet-friendly shelters in the Region, and this presents a barrier to access shelter for pet-owners experiencing homelessness. I conducted a literature review, environmental scan, key informant interviews, and designed and analyzed a survey of community members experiencing homelessness. The survey design and distribution involved collaboration with the Durham Advisory Committee on Homelessness and several community agencies in the Region. The results will be used to inform program planning, resource allocation, and shelter policies. This project demonstrates the importance of cross-sectoral collaboration to address housing as a determinant of health.

The second project was a literature review and environmental scan to understand the key components of a health equity plan for public health units. In accordance with the update to include health equity in the Ontario Public Health Standards, The Durham Region Health Department is interested in developing an organizational plan for health equity. Through the environmental scan, I found that public health units are in varying stages of organizational health equity planning, and have taken different approaches to embedding health equity in health unit operations. The report will advise the direction of health equity planning for the Durham Region

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Name: Emily Collett

Program: MPH Epidemiology

Project Title: Prevalence of Water and Food Insecurity in Children Under 5 Years of Age Among a Rural Kenyan Population

Research or Practice: Research

Key Words: Global Health, Maternal and Child Health

Abstract:

Introduction: For a person to be water secure, they require access to sufficient amounts of safe and affordable water. Globally, 1.8 billion people drink water that is unsafe¹ with Africa, Asia, and the Middle East having the lowest levels of water security². Most households in Kenya obtain their water from open sources which are more susceptible to contamination³. The regions in Kenya which receive the least amount of rain experience the highest levels of food insecurity⁴. Water insecurity can negatively affect child physical and emotional development. The purpose of this report is to understand the prevalence of water and food insecurity among rural Kenyan children under the age of 5 years.

Methods: The data used in this analysis was collected for the pediatric portion of the Shamba Maisha cluster-randomized control trial. The intervention group received a loan (\$150), a water pump and farm

equipment, and training in sustainable farming and financial management. A score was created for water and food security based on the sum of the responses for each topic. The water security score has a possible range of 0-60 and the food security score had a possible range of 9-36.

Results: Most participants (92.76%) experienced slight or no water insecurity. The net decrease in mean of water security scores for the intervention group was 8.8437 while it was 4.8796 for the control group. Most participants (58.55%) experienced either slight food insecurity or none at all. The intervention group had a net decrease in mean food security scores of 7.8368 and the control had a net decrease of 5.6013.

Conclusions: These results are important to public health because they identify the scale of water and food insecurity among children under five years in rural Kenya. This information can help inform interventions meant to improve child development in these communities.

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Name: Mohamed Djebli

Program: MPH Epidemiology

Project Title: Comparing risk factors for severe outcomes of influenza and respiratory syncytial virus using laboratory-confirmed testing

Research or Practice: Research

Key Words: Infectious and Communicable Disease, Prevention

Abstract:

Objective: Influenza and respiratory syncytial virus (RSV) are significant contributors to morbidity and mortality, especially in young children, older adults, and those with underlying health conditions. The objective of this study was to use population-based health administrative data and laboratory-confirmed test results from Ontario to estimate risk factors for severe outcomes related to influenza and RSV.

Design: We conducted a case-control study examining Ontario residents who had laboratory-confirmed influenza or RSV, and who were hospitalized in the 2014-15 to 2017-18 respiratory virus seasons. This data was linked to hospital discharge abstract data to examine risk factors for ICU admission and mortality from influenza and RSV.

Results: 11,871 and 4,964 individuals were identified as hospitalized with a positive influenza or RSV test, respectively. Cancer and dementia/frailty were associated with increased odds of mortality from influenza and RSV. Rural residency was associated with increased odds of ICU and death from RSV. Influenza vaccination was associated with decreased odds of death only for influenza.

Conclusion/Implications: We used laboratory data and hospital discharge abstract data to identify key risk factors for RSV and influenza. Some of these factors are unique to each virus, meaning these results could help distinguish risk groups for these similarly presenting viruses. The shared risk factors are also

noteworthy and are worth investigating in respiratory viruses beyond influenza and RSV. In the face of COVID-19, understanding general risk factors for respiratory viruses could be crucial when deciding target groups for vaccines and other interventions. Additionally, these results can inform and serve as a comparison to other methods of risk factor analysis using data sources other than laboratory data.

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Name: Caroline D'souza

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

Project Title: Developing, Selecting, and Validating Quality Indicators: A Literature Review

Research or Practice: Practice

Key Words: Knowledge Translation, Data Quality

Abstract: The purpose of the practicum position at the Registered Nurses' Association of Ontario (RNAO) was to refine the current guiding criteria and validation process for developing quality indicators. Quality indicators are used to collect data for quality improvement purposes help to validate the implementation of evidence-based recommendations developed by RNAO. These recommendations are updated every five years and help to enhance effective nursing care and patient safety in various health settings. The objectives of this practicum were to conduct an environmental scan of guiding criteria used by 16 leading health and research organizations to develop quality indicators; to conduct a literature review of published articles on guiding criteria for indicator development and validation; present the results to the evaluation team; and complete a write up of the methodology, results, and recommendations of the project. The findings collected from this practicum is of great significance as it will considerably enhance the efficacy and consistency of developing quality indicators that meet a high-quality requirement which will ultimately be reflected in the value of quality indicators. Having a systematic and evidence-based methodology for developing and validating quality indicators is the foundation of collecting robust data which will then result in meaningful change through data analysis. RNAO is an established professional organization and consistently advocates for robust public policy, promotes excellence in nursing practice, encourages nurses to help shape the health-care system, and influence decisions that impact nurses and the general population they serve. Therefore, the Best Practice Guidelines (BPG), which are evidence informed guidelines and recommendations that address a specific pertinent issue within the health care system, are often guided by up-to-date data collected by the institutions affiliated with RNAO. The data collected illuminates whether recommendations are feasible in current practice and if it leads to meaningful change within the health care system.

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Name: Hooria Emami

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

Project Title: Exploring Frontline Healthcare Worker's Stress and Recovery Off-Shift during the COVID-19 Pandemic

Research or Practice: Practice

Key Words: Infectious and Communicable Disease, Mental Health and Addictions

Abstract: I completed my practicum with 4YouandMe, a non-profit created to aid individuals who are interested in sharing health-related data using smartphones and other wearable devices so that they can better understand and navigate health conditions. The Stress and Recovery Study used the Oura ring and smartphones to track and understand the multidimensional components of stress and recovery off-shift in frontline healthcare workers during the current COVID-19 pandemic. My role in this study was actively working as a clinical research coordinator and digital participant engagement expert. This role consisted of calling participants and asking them about their overall study experience, details regarding their stress triggers, their home and work environments, and use of their Oura ring. I was responsible for maintaining contact with about 70 participants and creating contact logs after each phone call. The purpose of these phone calls is to provide support and encourage participant adherence to the study tasks. In addition to this primary role, I also completed an emerging COVID-19 hotspot map that was used in the recruitment process of the study. I outlined regions in the U.S that may become hotspots for COVID cases and may subsequently translate to a higher stressed group of healthcare workers in those areas. Additionally, I contributed to developing adherence tracking frameworks and other study materials used by team members. This study is contributing to the public health literature by using novel methodologies including digital approaches to understanding stress. Looking at digital stress responses and biometric data as signals to predict infection may inform other tools to aid in early detection. Finally, the study aims to determine whether resiliency factors and some social determinants of health modify stress and recovery.

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Name: Letebrhan Ferrow

Program: MPH Indigenous Health

Project Title: Circling Back to Prison Abolition

Research or Practice: Practice

Key Words: Indigenous Health, Marginalized Populations

Abstract: Discussion of the prison industrial complex has gained resurgence in recent times, although the statistics on the Canadian prison population have shown apparent racial disparities for decades, a culture change in the mainstream conversation has come to the surface. One of the clearest examples of racism in the prison population is overrepresentation of Indigenous peoples incarcerated in Canada.

Within the conversation about incarceration, advocates for prison abolition have called for the closing of all prisons as a resolution not only for the criminal justice system but for the public health system as well. Correctional facilities have proven that they are not equipped to address their high rates of mental health issues, as the facilities do not prioritize healing for those incarcerated, their families or their community. This project focuses on literature that discusses Indigenous justice systems through an abolitionist lens. Before colonization, Indigenous communities dealt with unacceptable behaviour in a variety of ways, depending on the traditions of that specific community and the actions by the offender. Alternatives to incarceration may include restitution given to the victim, incorporation of community members and Elders when deciding the appropriate course of actions, as well as counselling offered to all involved. Not only would prison abolition benefit Canadian society as a whole, it is necessary when speaking about cultural safety, self-determination and the health of Indigenous communities.

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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.

Link: <https://play.library.utoronto.ca/b7b0f3654ea340808c77110d1b926272>

Name: Jona Gjevori

Program: MPH Epidemiology

Project Title: Predicting Methicillin-Resistant Staphylococcus aureus (MRSA) Bloodstream Infection Incidence Rates using Canadian Nosocomial Infection Surveillance Program (CNISP)

Key Words: Infectious and Communicable Disease, Prevention

Abstract: Methicillin-Resistant Staphylococcus aureus (MRSA) is among the most prevalent nosocomial pathogens globally, causing significant morbidity, mortality, and healthcare costs. MRSA bloodstream infection (BSI) incidence rates in Canadian hospitals have significantly risen by almost 60% and have a mortality of over 20% upon Intensive Care Unit admission. MRSA is believed to be spread through healthcare workers; thus, high hand hygiene compliancy in addition to environmental cleaning are the cornerstone countermeasures to disrupting its transmission. The Public Health Agency of Canada (PHAC), in collaboration with the Canadian Nosocomial Infection Surveillance Program (CNISP), conducts national, sentinel surveillance on healthcare-associated infections like MRSA. As a Student Epidemiologist, I developed a research proposal detailing two study objectives: 1) develop a regression model to predict all incident MRSA BSI rates among acute-care hospitals in Canada using CNISP MRSA BSI incident cases from 2000 to 2019, and 2) create a compartmental (Susceptible-Infected-Recovered-Deceased) model to determine the impact of various Infection Prevention and Control (IPC) measures on the risk of healthcare-associated MRSA BSI transmission specifically. This study hopes to demonstrate that proper IPC compliance is associated with lower incident MRSA BSI rates with the goal being to produce a manuscript draft by 2021. MRSA poses a serious threat to patient safety globally and is becoming a growing national public health concern in Canada; determining which IPC strategy is most effective at disrupting MRSA transmission is essential to reducing incidence and mortality rates.

Link: <https://play.library.utoronto.ca/3861d68c6ece3634db31524bd966dc41>

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.

Link: <https://play.library.utoronto.ca/5dd1ab056c8f18b48e0b1bc1bff6e38d>

Name: Mackenzie Hamilton

Program: MPH Epidemiology

Project Title: Validating International Classification of Disease 10th revision algorithms for identifying influenza and respiratory syncytial virus hospitalizations

Research or Practice: Research

Key Words: Infectious and Communicable Disease, Validation Study

Abstract:

Objective: Routinely collected health administrative data can be used to efficiently assess disease burden in large populations, but it is important to evaluate the validity of these data. The objective of this study was to develop and validate International Classification of Disease 10th revision (ICD -10) algorithms that identify laboratory-confirmed influenza or laboratory-confirmed respiratory syncytial virus (RSV) hospitalizations using population-based health administrative data from Ontario, Canada.

Study Design and Setting: Influenza and RSV laboratory data from the 2014-15 through to 2017-18 respiratory virus seasons were obtained from the Ontario Laboratories Information System (OLIS) and were linked to hospital discharge abstract data to generate influenza and RSV reference cohorts. These reference cohorts were used to assess the sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV) of the ICD-10 algorithms. To minimize misclassification in future studies, we prioritized specificity and PPV in selecting top-performing algorithms.

Results: 83,638 and 61,117 hospitalized patients were included in the influenza and RSV reference cohorts, respectively. The best influenza algorithm had a sensitivity of 73% (95% CI 72% to 74%), specificity of 99% (95% CI 99% to 99%), PPV of 94% (95% CI 94% to 95%), and NPV of 94% (95% CI 94%

to 95%). The best RSV algorithm had a sensitivity of 69% (95% CI 68% to 70%), specificity of 99% (95% CI 99% to 99%), PPV of 91% (95% CI 90% to 91%) and NPV of 97% (95% CI 97% to 97%).

Conclusion: We identified two highly specific algorithms that best ascertain patients hospitalized with influenza or RSV. These algorithms may be applied to hospitalized patients if data on laboratory tests are not available, and will thereby improve the power of future epidemiologic studies of influenza, RSV, and potentially other severe acute respiratory infections.

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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. However, 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.

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Name: Fatima Khadadah

Program: MScCH Health Practitioner Teacher Education

Project Title: The effects of non-pharmaceutical interventions on SARS-CoV-2 transmission in different socioeconomic populations in Kuwait: A modelling study

Research or Practice: Research

Key Words: Global Health, Infectious and Communicable Disease, Marginalized Populations

Abstract:

Background: Aggressive non-pharmaceutical interventions (NPIs) may reduce transmission of SARS-CoV2. The extent to which these interventions are successful in stopping the spread have not been characterized in countries with distinct socioeconomic groups. We compared the effects of a partial lockdown on disease transmission among Kuwaitis (P1) and non-Kuwaitis (P2) living in Kuwait.

Methods: We fit a metapopulation Susceptible-Exposed-Infectious-Recovered (SEIR) model to reported cases stratified by two groups to estimate the impact of a lockdown on the effective reproduction number (R_e). We estimated the basic reproduction number (R_0) for the transmission in each group and simulated the potential trajectories of an outbreak from the first recorded case of community transmission until 12 days after the lockdown. We estimated R_e values of both groups before and after the lockdown, simulated the effect of these values on epidemic curves and explored a range of cross-transmission scenarios.

Results: We estimate R_0 at 1.06 (95% CI: 1.05-1.28) for P1 and 1.83 (1.58-2.33) for P2. On March 22nd, R_e for P1 and P2 are estimated at 1.13 (1.07-1.17) and 1.38 (1.25-1.63) respectively. After the curfew had taken effect, R_e for P1 dropped modestly to 1.04 (1.02-1.06) but almost doubled for P2 to 2.47 (1.98-3.45). Our simulated epidemic trajectories show that the partial curfew measure modestly reduced and delayed the height of the peak in P1, yet significantly elevated and hastened the peak in P2. Modest cross-transmission from P2 to P1 elevated the height of the peak in P1 and brought it forward in time closer to the peak of P2.

Conclusion: Our results demonstrate that a lockdown can reduce SARS-CoV2 transmission in one subpopulation but accelerate it in another. At the population level, the consequences of lockdowns may vary across the socioeconomic spectrum. Any public health intervention needs to be sensitive to disparities within populations.

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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.

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Name: Peiqi Meng

Program: MPH Occupational and Environmental Health

Project Title: Workplaces and COVID-19: Occupational health and safety considerations for reopening and operating during the pandemic

Research or Practice: Research

Key Words: Occupational Health, Prevention

Abstract:

Introduction: In response to the COVID-19 pandemic many non-essential Canadian workplaces ceased normal operations in March 2020. As more workers return to work, workplaces may be important sites of transmission within communities. The goal of this project was to summarize preventive measures that can support safer reopening and operation of workplaces during the COVID-19 pandemic.

Methods: In collaboration with the Canadian Standards Association (CSA) Group, a scoping review of existing guidelines, standards, and literature relating to COVID-19 and work was conducted. The resulting report and guidance document underwent three rounds of rapid review by subject area experts and senior leaders across Canada. In total 132 individuals were invited to provide feedback, 62 (47%) participated.

Results: Three domains of preventive measures were identified: (1) building systems, (2) workplace design and (3) supporting workers. Following a building shutdown, HVAC and plumbing systems can harbour chemical and microbiological hazards (other than COVID-19) that need to be managed. Upon re-opening, workplace design can be altered to reduce COVID-19 transmission by supporting physical distancing and sanitization measures can be increased. Personal protective equipment (PPE) and hand hygiene should be implemented within a multifaceted strategy. Employers can also act to protect the physical and psychological health of workers, to support compliance with local public health guidelines, and to ensure accommodations where needed.

Recommendations: COVID-19 is both an occupational and public health hazard. Though occupational health and safety and public health are often regulated by separate bodies, it is important that work together to protect Canadians. Employers have a responsibility to ensure workers' health and safety with respect to COVID-19, as well as other workplace hazards. A guidance document is available from the CSA Group to support workplaces during the COVID-19 pandemic.

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Names: Aliza Mohamed and Ronaz Remtulla

Program(s): Master of Health Informatics (IHPME), MPH Epidemiology

Project Title: The Canadian Community's Knowledge on the History and Matters of Indigenous Peoples of Canada

Research or Practice: Practice

Key Words: Indigenous Health, Social Determinants of Health

Abstract:

Objective: To gather informal evidence on the Canadian community's knowledge of the history and matters of Indigenous Peoples of Canada and identify gaps in education and awareness.

Methods: A cross-sectional study was performed through a structured and anonymous questionnaire that was completed on a voluntary basis. Knowledge gained from partnering with Indigenous members of the community and participating in a blanket exercise was used to produce questions surrounding current and historical matters of Indigenous peoples of Canada. The blanket exercise is an Indigenous-led educational program that tells the story of Canadian history from an Indigenous lens. The inclusion criteria for the study was individuals enrolled in a primary and/or secondary Canadian educational institution and non-Indigenous self-identification. The survey sample most closely represents individuals between 18 to 24 years old in the population.

Results: The target demographic scored an average of 54.4% on knowledge-based survey questions. Most individuals answered questions more accurately on topics relating to historical facts, such as the content of the Indian Act, than they did on topics relating to current Indigenous issues, like percent of land mass occupied by Indigenous peoples. Despite indicating primary and secondary schooling as the main source of education on Indigenous history, 86% of participants found their education "limited" and "inadequate". Results of the survey do not definitively represent the Canadian population, as this was an informal study completed on a voluntary basis.

Conclusion: Survey results highlighted gaps in the Canadian population's knowledge on challenges faced by Indigenous members of Canada. Many respondents recognized an inadequate primary and/or secondary education on Indigenous issues, suggesting a need for educational reform. Increasing awareness on Indigenous matters can potentially reduce discrimination and systemic racism, which can improve social determinants of health. This data can serve as an informal basis of knowledge until further research is conducted.

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Name: Iman Musani

Program: MPH Epidemiology

Project Title: Opioid-related hospitalizations with co-diagnoses for mental disorders in Canada

Research or Practice: Research

Key Words: Mental Health and Addictions, Opioid Surveillance, Comorbidities

Abstract: Canada is in the midst of an opioid crisis, with 19,377 opioid-related hospitalizations and 15,393 opioid-related deaths occurring between January 2016 and December 2019. At the federal

government level, gaining a better understanding of the mental health profile of those who experience opioid-related harms has been identified as a priority to inform evidence-based policies and interventions. There is evidence to suggest that many people experiencing opioid-related harms also experience other mental disorders, but most of the research in this area has been conducted in US and UK populations. Using national hospital administrative data (CIHI-DAD), we examined three types of opioid-related hospitalizations and their associated co-diagnosed mental disorders from April 2018 to March 2019. Our analysis found that co-diagnoses for mental disorders are common among people hospitalized for opioid-related poisonings, opioid use disorders and adverse drug reactions from prescribed opioids. For people hospitalized for these opioid-related harms, other substance-related and addictive disorders (including disorders due to the use of alcohol, cannabinoids, cocaine, other stimulants, sedatives and hallucinogens) were the most common co-diagnosed mental disorders. We also observed age- and sex-specific differences in the presence of co-diagnosed mental disorders. These findings highlight the importance for interventions to incorporate a poly-substance use lens that accounts for varying harms by substance type and context of use. It is important to note that these data do not reflect the overall prevalence of co-occurring mental disorders among people experiencing opioid-related harms in Canada, but rather co-diagnoses for mental disorders which were deemed significant to the patient's hospital stay. The mental disorder data from our analyses reflect minimal estimates and future research is needed to determine overall co-occurring prevalence. The Government of Canada will continue to work to improve data and analysis to inform strategies and interventions to reduce opioid-related harms across the country.

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Name: Emilie Pianarosa

Program: MPH Epidemiology

Project Title: Global Rural and Remote Patients with Rheumatoid Arthritis: A Systematic Review of Disease Epidemiology, Clinical Outcomes and Health Service Utilization

Research or Practice: Research

Key Words: Global Health, Marginalized Populations, Social Determinants of Health

Abstract:

Background: Rural and remote patients with rheumatoid arthritis (RA) are at risk for inequities in health outcomes based on differences in physical environments and healthcare access potential compared to urban populations. The aim of this systematic review was to synthesize epidemiology, clinical outcomes and health service use reported for global populations with RA residing in rural/remote locations.

Methods: Medline, EMBASE, Healthstar, CINAHL and Cochrane were searched from inception to June 2019 using librarian-developed search terms for RA and rural/remote populations. Peer-reviewed

published manuscripts were included if they reported on any of an epidemiology, clinical or health service use outcomes.

Results: 54 articles were included for data synthesis, representing studies from all continents. In 11 studies where there was an appropriate urban population comparator, rural/remote populations were not at increased risk for RA, whereas 1 study reported increased and 5 studies reported decreased prevalence in rural/remote populations. Clinical characteristics of rural/remote populations in studies with an appropriate urban comparator showed no significant differences in disease activity measures or disability, but with 1 study reporting worse physical function and health-related quality of life in rural/remote populations. Studies reporting on health service use provided evidence that rural/remote residence impacts diagnostic time, ongoing follow-up, access to RA-care related practitioners and services, and with variation in medication access and use.

Conclusion: This synthesis highlights that RA epidemiology and clinical outcomes are not necessarily different between rural/remote and urban populations, however rural/remote patients face greater barriers to care which increases the risk for inequities in outcomes. From a public health perspective, we need leadership to implement structures and policies to support better outcomes in rural and remote populations. Access to health services is a recognized determinant of health, which presents the opportunity for actionable strategies and approaches to resolve inequities in care delivery.

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Name: Sarah Richter

Program: MPH Epidemiology

Project Title: Prevalence of Childhood Adversities in Ontario and their Indication of Prolonged Post-Concussion Symptoms

Research or Practice: Practice

Key Words: Chronic Disease, Injury, Maternal and Child Health

Abstract: Concussions are a growing public health concern, which manifest as cognitive, somatic and psychological symptoms. There is currently no consensus on who is most likely to have persistent symptoms. However, risk of chronic disease has previously been linked to childhood adversities. Assessing childhood adversities has potential to inform post-concussion prognosis.

Our goals were to describe Ontario's childhood adversity prevalence and determine its association with post-concussion symptoms. Ontario's prevalence was determined by comparing our cohort's prevalence to a demographically similar American state. Patient intake data from a tertiary care clinic was used, which included the Rivermead Post-Concussion Questionnaire (RPQ), the Adverse Childhood Experiences (ACE) survey and other neurotrauma assessments. Patients' inclusion was based on symptoms at clinic presentation, compared to a standard definition of concussion. Data was entered in REDCap and exported to SPSS for analysis; we performed the chi-square test for independence.

Among the 581 eligible patients, 52.0% were female with a median age of 40 (IQR, 25). Their median months since injury upon clinic presentation was 4 (IQR, 10). ACE and RPQ median scores were 1 (IQR, 2) ranging from (0,10) and 20 (IQR, 19) ranging from (0, 48), respectively. RPQ symptom subdomains had scores of 4, 7 and 4, for cognitive, somatic & psychological symptoms, respectively. Pennsylvania was the most similar to Ontario and had similar ACE prevalence to our cohort. The statistical analysis displayed sufficient evidence for association between each of the symptom subdomains and childhood adversities; the strongest associations were for somatic and psychological symptoms.

Our findings display a need for preventive measures in the first 18 years of life or improved care targeting somatic and psychological outcomes among high ACE patients. Therefore, other clinics should use the ACE questionnaire at intake. These findings are also supported by research on biomarkers & limbic system dysregulation.

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Name: Maham Qureshi

Program: MPH Nutrition and Dietetics

Project Title: The Power of Communication: Exploring Various Approaches Before & During COVID-19

Research or Practice: Practice

Key Words: Knowledge Translation, Food and Nutrition, COVID-19

Abstract: Earlier this year, I was placed at The Princess Margaret Hospital in inpatient oncology (cancer) focused on malignant hematology. In this rotation, I gained knowledge of cancer-related side effects and their relation to nutrition. At ELLICSR Kitchen, I utilized this information to develop scripts and shotlists outlining various nutrition tips to manage cancer-related side effects. The written pieces will be transformed into introductory videos available online. The ultimate goal is to increase online availability to cancer-related nutrition content for patients living with cancer and their caregivers.

Following the lockdown, I began a virtual placement at Regent Park Community Health Centre (RPCHC). I spoke with clients over the telephone, met with my preceptor via Zoom and managed projects online. I was involved in the PhotoVoice project, which asked the community "How has COVID-19 impacted your life?" Submissions were received over email, and shared with the general public through social media to offer insight on community assets and barriers.

The power of both projects originated from visual communication in the form of videos and photographs, and the ability to share findings and information online, where it would be accessible to a wide audience - anywhere at any time.

Prior to COVID-19, communication was integral to providing healthcare. However, this remains the case and the ability to adapt to the changing needs of the population, and reach them where they are is vital. This mission to provide the most accessible and effective healthcare during this time is supported by various communication tools and opportunities to connect virtually. This year I experienced providing

nutrition care at a distance, to both individual clients and larger populations, and understood the true power of communication.

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Name: Gul Saeed

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

Project Title: Resuming In-person Psychological Treatment in the Era of COVID-19: Barriers & Facilitators

Research or Practice: Research

Key Words: Patient Centred Research, Perinatal Mental Health, Psychological Treatments, COVID-19

Abstract:

Background: Patient-centered research has emerged as a promising model to adequately address the needs and preferences of patient populations with mental disorders. Effective patient-centered research actively engages multiple stakeholders, including patients, their families, and health professionals, to ensure that patients' perspectives are fully represented. The SUMMIT Trial aims to increase access to psychological treatment and implements a multi-stakeholder perspective to understand the needs/preferences of perinatal populations with symptoms of depression and anxiety. Specifically, this randomized trial examines whether Behavioral Activation (BA) delivered via telemedicine is as effective as in-person treatment. However, due to COVID-19, the study suspended in-person BA sessions and completely shifted to telemedicine. To ensure BA remains widely accessible, The SUMMIT Team strives to resume in-person treatment in the near future.

Objective: To gain perspectives of key stakeholders on the potential barriers and facilitators for participants to resume in-person BA sessions in a COVID-19 context.

Methods: The Focus Group Discussion (1 hour) was conducted via Zoom with N=10 stakeholders, including patient advocates, nurses, clinicians, and researchers. Qualitative data was coded using NVivo and content analysis was performed to quantify frequently endorsed themes.

Results: The majority of stakeholders considered resuming in-person BA sessions to be a challenge amidst COVID-19, with more barriers than facilitators mentioned overall. Most commonly endorsed barriers that participants may face when attending in-person treatment included arranging childcare (n=8; 80%) and discomfort/fear of coming to the hospital (n=7; 70%). The most widely endorsed facilitators for resuming in-person treatment during COVID-19 were clearly communicating hospital and transportation safety precautions to participants (n=7; 70%) and conducting in-person sessions at an off-site location (n=7; 70%).

Conclusion: The results can inform: 1) how and when to resume in-person BA sessions, and 2) the design and implementation of strategies to make in-person psychological treatments more patient-centered for perinatal populations during COVID-19.

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Name: Yina Shan

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

Project Title: Greenness and asthma, allergic rhinitis, and bronchitis: A systematic review and meta-analysis

Research or Practice: Research

Key Words: Environmental Health, Built Environment

Abstract:

Background: Respiratory illnesses contribute significantly to the global burden of disease. Environmental factors such as greenness may affect the etiology of respiratory illnesses; however, the mechanisms are not well-understood, and findings are inconsistent. This understanding has practical implications on promoting health through urban planning and built environment policies.

Objectives: This systematic review and meta-analysis investigated the association between greenness and the risk of asthma, allergic rhinitis, and bronchitis in the general population, including children and adults.

Methods: A systematic search of peer-reviewed literature was conducted in Web of Science, Scopus, Embase, Medline, AMED, Cochrane Library Central, CINAHL, GreenFILE, and Sociological Abstracts up to September 1, 2020. The Newcastle-Ottawa Scale was used for quality assessment. Meta-analyses were performed to assess the effect of greenness, as measured by the Normalized Difference Vegetation Index (NDVI), on asthma and allergic rhinitis.

Results: The review included 45 epidemiological studies using varying study designs, greenness measures, and outcome measures. The meta-analysis included eight studies (6 and 5 for asthma and NDVI in a 100-meter and 500-meter buffer, respectively, and 4 for allergic rhinitis and NDVI in a 500-meter buffer). The pooled odds ratios for asthma and 100-meter buffer NDVI (OR: 0.99 95%CI: 0.93-1.06; I²: 61%), asthma and 500-meter buffer NDVI (OR: 0.99 95%CI: 0.83-1.19; I²: 70%), and allergic rhinitis and 500-meter buffer NDVI (OR: 1.00 95%CI: 0.94-1.06; I²: 0%) showed no significant overall association. There were insufficient studies to conduct a meta-analysis for bronchitis.

Conclusion: The effect of greenness on asthma, allergic rhinitis, and bronchitis varied due to differences in study design, exposure and outcome measurement, covariates, and regional characteristics between studies. Standardized measures, study designs, and confounders are needed to generate comparable findings. Future studies should investigate aspects of greenness such as allergenicity and seasonality to elucidate the complex links between greenness and respiratory illnesses.

Link: <https://play.library.utoronto.ca/589fbb06dc40e188c13a0159fbc345da>

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.

Link: <https://play.library.utoronto.ca/0782754cd2e86755ed1129c418179968>

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.

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Name: Abhinav Thakral

Program: MPH Epidemiology

Project Title: Comparison of Two Genome-Wide Association Studies of Heart Rate Response to Exercise from the UK Biobank

Research or Practice: Research

Key Words: Biostatistics, Non-Communicable Disease, Prevention, Genetics, GWAS, Polygenic Scores

Abstract: The short-term changes in heart rate (HR) during and after exercise are important physiologic traits. Variations in these traits have been shown to be associated with mortality from cardiovascular causes. Further, these variations have been shown to be heritable. From a public health perspective, knowledge of genetics of these heart rate traits is important because it could help in targeting population health interventions towards those at greater risk of adverse cardiovascular outcomes. Therefore, we conducted a systematic review of genome-wide association studies with the aim of identifying genetic variants associated with these heart-rate traits. Another aim was to compare Polygenic Risk Scores (PRS) for the heart-rate traits from these studies. PRS are summary estimates of risk for a particular disease for an individual based on their genetic makeup. These PRS could potentially identify individuals at higher risk of the disease.

The systematic search yielded two studies (Verweij et al. and Ramirez et al.) that met our inclusion criteria. Both were conducted on the UK Biobank population. The two studies identified several genetic variants, many of which were common and some that were mutually exclusive between the studies. However, there was a good agreement of Polygenic Risk Scores (PRS) from the studies. These PRS could potentially identify individuals at higher risk of adverse cardiovascular outcomes. However, the PRS have not been validated in clinical settings. Further, both studies had an under-representation of individuals of non-European ancestry. Future studies would need to help address this gap and to validate PRS in clinical settings.

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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.

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Name: Mariana Villada Rivera

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

Project Title: Advancing Health Promotion Perspectives on the COVID-19 Pandemic: A Health Promotion Practicum at Global Health Promotion, International Union for Health Promotion and Education

Research or Practice: Practice

Key Words: Global Health, Knowledge Translation, COVID-19

Abstract:

Background: The International Union for Health Promotion and Education (IUHPE) is a global, independent agency comprised of individuals and organizations committed to improving health and well-being through education, community action and the development of healthy public policy. Global Health Promotion (GHP) is the IUHPE's official publication, publishing authoritative peer-reviewed articles and practical information.

Call for Papers on COVID-19: In April 2020, GHP participated in a Joint Call for Papers with *Health Promotion International*, inviting contributions on Health Promotion Perspectives on the COVID-19 Pandemic. The Call encouraged the contextualization, development and exchange of health promotion perspectives, informed by global efforts in research, education, policy and practice. Over 170 abstracts were submitted for consideration and 49 were selected exclusively for GHP. Authors were invited to submit the full papers for peer-review by July 2020. Manuscripts that successfully complete the review process will be published online at the end of 2020 and assigned to an issue in early 2021.

Health Promotion Practicum: The practicum encouraged close work with the Editor in Chief, Managing and Guest Editors of GHP to support the editorial process of the Call. Main contributions included developing a special pool of peer-reviewers, planning an online collections structure, and supporting a communications strategy to disseminate published content and promote the journal.

Implications for Public Health: GHP provides a global audience with an interdisciplinary forum for the dissemination and exchange of theory, innovation, research and evaluation associated with health promotion and public health practice. The Call highlights responses to COVID-19 at the global, national, organization and community levels and applications of health promotion evidence, approaches and strategies. The former will contribute necessary perspectives to literature on COVID-19, promote global and regional partnerships and capacity development, and inform future pandemic preparedness efforts.

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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.

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Name: Yiran Wang

Program: MPH Nutrition and Dietetics

Project Title: Combat Food Insecurity amid the COVID-19 Pandemic: an emergency food project for low-income seniors in the City of Thunder Bay

Research or Practice: Practice

Key Words: Emergency Preparedness, Marginalized Populations, Food and Nutrition

Abstract: Food insecurity has long been a public health issue in Northwestern Ontario, which adds a substantial burden on social costs and health care. Food insecurity is further exacerbated during the COVID-19 pandemic, due to the closure or limited hours of emergency food and transportation services. Low-income seniors (age > 65 years old) face additional risks of food insecurity due to their vulnerability to the coronavirus. To help reduce food insecurity in this specific population, an emergency food program named "Senior Food Bags" was established by Roots to Harvest at the City of Thunder Bay, which provides insights on incorporating skill-building into food distribution activities.

As a dietetic intern, I participated in the planning and implementation of the project. Considering that a lack of fresh produce, limited cooking skills, and comorbidities are major barriers for local low-income seniors, we aim to impart seniors with basic cooking skills and create recipes to consider health concerns. Hence, a weekly recipe was developed to encourage seniors to use healthy ingredients (e.g. fresh and preserved produces of proteins, grains, fruits, and vegetables) included in the bag for meal preparation. No ID was required, and seniors were respectfully approached for communication during

the distribution. The mid-term survey suggested that all senior participants (n=40) thought the project helped reduce food insecurity during COVID-19. 1/3 of participants mentioned being more confident and capable of preparing healthier meals.

The project illustrated that skill-building and dignified services in emergency food programs can do more than provide food. To enhance the capacity of food security, the first step is to equip individuals with intentions and skills to combat food challenges. Therefore, in addition to food distribution, food donor projects should also focus on fostering individuals' food literacy development to empower them and aid public health.

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Name: Rochelle White

Program: MPH Epidemiology

Project Title: Exploring the association between rectal bacterial STIs and anal HPV among gay, bisexual, and other men who have sex with men (gbMSM) in Montreal, Toronto, and Vancouver

Research or Practice: Research

Key Words: Infectious and Communicable Disease, Prevention

Abstract: Majority of cervical and anal cancers are caused by HPV. Among women, chlamydia (CT) and gonorrhea (NG) “play a role as co-factors in HPV-mediated cervical carcinogenesis”.¹ Bacteria including CT and NG cause inflammation of the cervix which can increase susceptibility to HPV and increase persistence of already-existing HPV. A similar process may occur in the anal canal as the morphology of the anal canal is similar to the cervix. The natural history of HPV infection in the anal canal is analogous to cervical infection.

Our goal was to explore the association between rectal CT and NG infection with anal HPV infection among gay, bisexual, and other men who have sex with men. We also aimed to determine whether this association was different among HPV-vaccinated and unvaccinated men.

Engage-HPV is a prevalence study of oral and anal HPV infection. Men aged 16-30 were recruited in Vancouver, Montreal, and Toronto. Participants completed a detailed sexual health questionnaire and provided self-collected anal swabs used for HPV detection.

Overall, 94.23% of participants that tested positive for rectal CT/NG also tested positive for anal HPV. There is a significant association between rectal CT/NG and anal HPV, after controlling for recent sexual behavior. This finding supports the co-factor hypothesis. Men that have a rectal CT/NG infection are 3.4 times more likely to have an anal HPV infection compared to those who do not have a rectal CT/NG infection. After stratifying by vaccination status, we found that all vaccinated men with CT/NG were coinfecting with a non-vaccine preventable type of HPV. Therefore, vaccination alone is not sufficient to prevent HPV infection. Anal HPV screening is not available, but screening is available for rectal CT and NG. Therefore, clinicians should encourage testing and treatment for rectal CT and NG as a means of preventing HPV-mediated anal carcinogenesis.

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Name: Steven Winkelman

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

Project Title: Challenging the HIV Epidemic in Ontario Through PrEP and HIV Testing: An OHTN Practicum in Two Parts

Research or Practice: Practice

Key Words: Infectious and Communicable Disease, Prevention, HIV

Abstract: The Ontario HIV Treatment Network (OHTN) is a non-profit network which collaborates with health clinics, AIDS service and community organizations, and policy leaders in order to improve the health and wellbeing of people living with and at risk of HIV. I joined the OHTN as a member of the Collective Impact team, with a focus on examining the barriers and facilitators to Pre-Exposure Prophylaxis (PrEP) uptake in Ontario. PrEP is a once-daily pill which is highly effective in preventing HIV infections for HIV-negative people, however usage remains relatively low in Ontario. In this role, I liaised with the Knowledge Synthesis team at OHTN to collect, analyse, and synthesize recent scientific literature on Pre and Post-exposure prophylaxis (PEP) in order to create a comprehensive annotated bibliography on PrEP research. Key findings were drawn from the research to identify potential next steps to increase PrEP use for priority populations in Ontario. Findings from the annotated bibliography were presented to OHTN staff, and have been used to assist in the development of two PrEP study proposals; 1) a cisgender and transgender women-focused PrEP education package and HIV risk screening tool, and 2) a pharmacist-led PrEP delivery pilot.

I also worked with the Testing and Clinical Initiatives team at the OHTN, to aid in the implementation and evaluation of two HIV-testing projects: the GetaTest pharmacy-based HIV-testing study, and the GetaKit HIV self-testing pilot program. In this role I drafted health communication materials; analysed survey data and drafted project reports for stakeholders; and

provided perspectives on the HIV-care continuum, particularly on PrEP initiation, adherence, and efficacy. My work with the OHTN was important to public health because it sought to expand access to HIV testing and prevention services for priority populations in Ontario, including men who have sex with men, and cis and trans women

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Name: Megan Brown Wollenberg

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

Project Title: Gender and Gender-Based Violence: associations and non-associations with malnutrition

Research or Practice: Research

Key Words: Global Health, Food and Nutrition, Gender and Gender- Based Violence

Abstract: Action Against Hunger is an international non-governmental organization with six headquarters located around the world that focus on ending hunger in low and middle-income countries. The Canadian office uniquely provides evidenced-based technical support and evaluation for headquarters focused on implementing interventions and programming to mitigate hunger. For my practicum I worked in the International Gender Unit to support ongoing policy development and updating of the organization's cross-network gender policy. Gender inequalities have direct causal links with malnutrition; yet, in March 2020 the Global Nutrition Report showed that global efforts to mitigate hunger by addressing gender inequalities are behind on most targets. To better capture and learn how to address underlying inequalities and drivers of malnutrition, my practicum research focused on the associations and non-associations between gender, gender-based violence, and malnutrition. This practicum placement had three objectives: 1) to provide a literature review 2) to provide a database comprised of peer-reviewed and grey literature; and, 3) to support new policy development during cross-headquarters discussions, research, and reporting. During this placement I had the opportunity to work online with individuals across five continents and twenty-one countries. This included facilitating break-out policy discussions during policy meetings, as well as semi-structured interviews that were conducted prior to providing a literature review and socio-ecological discussion on gender, gender-based violence and malnutrition. The opportunity to engage in international and cross-cultural collaborative work has been the highlight of my practicum. It has provided the opportunity to not only sharpen my reflexive praxis as a student of public health, but to sharpen my understanding of the policy process at the organizational level. It has additionally illuminated the importance of structural and social contexts in public health research and programming, especially within efforts to address gender inequalities and gender-based violence associated with malnutrition.

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Names: Thilaxcy Yohathasan 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 Yohathasan, (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 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.

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