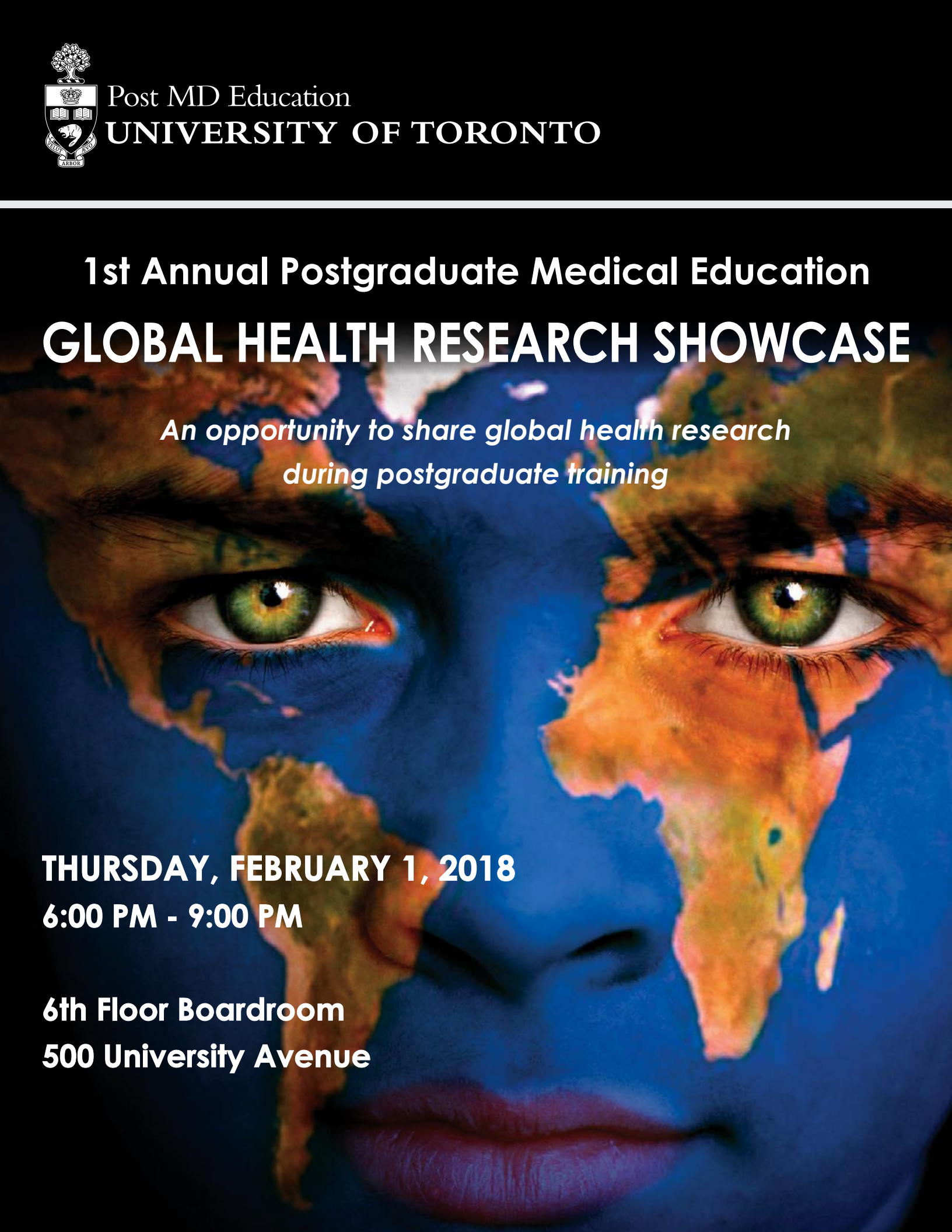
Post MD Education
UNIVERSITY OF TORONTO

1st Annual Postgraduate Medical Education

GLOBAL HEALTH RESEARCH SHOWCASE

An opportunity to share global health research during postgraduate training



THURSDAY, FEBRUARY 1, 2018
6:00 PM - 9:00 PM

6th Floor Boardroom
500 University Avenue

Post MD Education
UNIVERSITY OF TORONTO

1st ANNUAL POST GRADUATE MEDICAL EDUCATION GLOBAL HEALTH RESEARCH SHOWCASE

Showcase Moderator
Dr. Emilie Chan, *Nephrologist, Brampton Kidney Wellness Centre*

Showcase Facilitators
Dr. Shannon Chun, *Emergency Medicine, PGY1*
Dr. Anna Dare, *Surgery, PGY3*
Dr. Jeremy Zung, *Medicine, PGY2*

6:10 pm	Welcome – Dr. Emilie Chan
6:15 pm	1. Dr. Marisa Leon-Carlyle, *Psychiatry, PGY2*
6:30 pm	2. Dr. Samantha Liauw, *Internal Medicine, PGY3*
6:45 pm	3. Dr. Muhammad Akbar, *Neurosurgery, PGY4* Aram Abbasian, *MD Program, 2nd year, University of Toronto* (Presenter)
7:00 pm	4. Dr. Alireza Mansouri, *Surgical Oncology Fellow* Brij Karmur, *MD Program, 2nd year, University of Toronto* (Presenter)
7:15 pm	5. Dr. Wesley Rajaleelan, *Anesthesia Fellow*
7:30 pm	BREAK
7:45 pm	6. Dr. Adriana Di Stefano, *Family Medicine, PGY2*
8:00 pm	7. Dr. Zenita Alidina, *Psychiatry, PGY3*
8:15 pm	8. Dr. Sara Jassemi, *Adolescent Medicine, Psychiatry, PGY5*
8:30 pm	9. Dr. Rebecca Rodin, *Internal Medicine, PGY1*
8:45 pm	10. Dr. Alissa Tedesco, *Family Medicine, PGY2*
9:00 pm	Discussion and Thank you *Moderated by* Dr. Emilie Chan
9:15 pm	END

PGME Global Health Research Showcase Leadership Team

Dr. Tehmina Ahmad, Internal Medicine
Dr. Shannon Chun, Emergency Medicine
Dr. Hourmazd Haghbayan, Internal Medicine
Dr. Shambe Mutungi, OBS/GYN
Dr. Helene Retrouvey, Plastic and Reconstructive Surgery
Dr. Amruta Shanbhag, Geriatrics
Dr. Horia Vulpe, Radiation Oncology (Columbia U, NYC)
Dr. Barry Pakes, Judy Kopelow, PGME, Global Health

ABSTRACTS

1. Marisa Leon-Carlyle, Psychiatry

Dr. Marisa Leon-Carlyle, Psychiatry, PGY2

Understanding Patient Flow through the Dominican Emergency Department: A Quality Improvement Study

Background: Dominica is a Caribbean island with a population of 75,000 all serviced by a single Emergency Department (ED). Due to patient complaints regarding wait times and staff concerns regarding patient load, hospital administration was interested in assessing and optimizing patient flow through the ED.
Objectives: To quantify flow through the Princess Margaret Hospital E D i n Dominica and i dentify p otential areas for improvement.
Methods: Patient flow through the ED was mapped by a hospital employee and verified by ED staff. Crucial times (registration, triage, physician assessment, discharge) were identified and subsequently recorded on patient charts. Patient charts from March 1 to March 17, 2016 were randomly selected for retrospective review. Average wait times and process times were calculated. An external observer directly observed patient flow through the ED on three random days to verify accuracy of times recorded and to gather qualitative observations on influencers of patient flow. A cause and effect analysis was constructed demonstrating factors contributing to wait times. This was presented to staff and change ideas collectively brainstormed.
Results: An average of 77.6 patients registered in the ED per day. 74% arrived between 8 am and 8 pm. On average, patients wait 43 minutes to be triaged and over 2 hours to see a physician. 21% of patients left without being seen. 17 staff, hospital, policy and procedural influences on long wait times were observed, 13 were identified as actionable causes, and 18 change ideas identified by ED staff.
Conclusion: The average patient to the only ED in Dominica waits longer than CTAS guidelines for any triage level. Through br ief quality improvement interventions, staff were able to identify future priority areas to improve the timeliness of emergent. With minimal resources, similar interventions can be implemented in other low-resource settings to identify and guide quality improvement initiatives.

2. Samantha Liauw, Internal Medicine, PGY3

Dr. Samantha Liauw, Internal Medicine, PGY3
Dr. Ayelet Kuper, Internal Medicine, Attending Physician
Dr. Lisa Richardson, Internal Medicine, Attending Physician
Dr. Geoffroy Noel, Department of Anatomy, McGill University

Global Health Education at Home:
Canadian Medical Students' Perspectives after a Bidirectional Global Health Initiative

Background: Bidirectional exchange between high- and low-income countries is a proposed strategy to promote sustainability and reciprocity in global health partnerships. There is a paucity of research exploring the impact of bidirectional exchange on medical students from high-income countries. From 2012, McGill University (Canada) and Université Quisqueya (Haiti) have engaged in a bidirectional medical student exchange.
Objectives: The aim of this study was to explore Canadian students' experience as they learned alongside Haitian students in Canada.
Methods: In 2017, the authors conducted a qualitative descriptive study that collected data through one-on-one, semistructured interviews with ten Canadian medical students. The authors' critical constructivist thematic analysis, while exploratory, was sensitized by

the authors' knowledge of contemporary frameworks of global health competencies and best practices for global health initiatives, as well as by key concepts including cultural humility, reflexivity, and agency.
Results: The authors recognized three important aspects of the relationship between the Canadian and Haitian students: 1) the experience prompted students to reflect on their clinical practices and privilege, 2) students recognized and worked
to address power dynamics within the cross-cultural relationships, and 3) students perceived Haitian students as agents of change. Transformation and growth were facilitated by working in groups, having a unifying learning task, and informal social gathering.
Conclusions: Bidirectional programs may have implications in students' perception of the agency of international medical learners. As a manifestation of cross-cultural exchange, some students went through a type of "culture shock" at home. These tensions created space to practice reflexivity and cultural humility.

3. Muhammad Ali Akbar, Neurosurgery, PGY4

Aram Abbasian, MD Program, 2nd year, University of Toronto (Presenter)
Dr. Alireza Mansouri, Neurosurgery, PGY7
Dr. Shervin Taslim, Neurosurgery, PGY4
Dr. George Ibrahim, Staff, Neurology, Sickkids
Dr. Muhammad Akbar, Neurosurgery, PGY4

Surgical Outcomes for Medically Intractable Epilepsy in Low and Middle Income Countries – A systematic review and meta analysis

Background: Global burden of epilepsy is disproportionately weighted toward low and middle income countries (LMICs). Surgery is an effective treatment for medically-intractable epilepsy (MIE) but remains under-utilized.
Objective: In this study we set out to examine surgical outcomes for MIE in LMICs reported in the literature.
Methods: A meta-analysis with a random-effects model was performed following PRISMA and MOOSE guidelines. 20 of 162 initially identified studies were selected reporting seizure outcomes for at least 10 patients of any age undergoing surgery for MIE in LMICs with a defined follow up period. We pooled estimates of seizure-freedom and favourable outcomes.
Results: 20 total studies selected, 16 from Asian centres. Average patient age in all studies less than 30 years and average preoperative duration of epilepsy ranged from 3-16.1 years. 437 out of 951 described pathologies was medial temporal sclerosis. 1294 of 1773 described procedures was Anterior temporal lobectomies +/- Anterior Hippocampectomy (ATL +/- AH). Pooled seizure freedom estimate following ATL +/- AH was 68% (95% CI 0.55,0.82). Pooled estimate of favourable seizure outcomes was 79% (95%Cl 0.74,0.85). Surgical treatment was found to be cost-effective though systematic analysis was limited.
Conclusion: Epilepsy surgery for MIE shows a high percentage of seizure freedom and favourable seizure outcomes in low to middle income countries. A concerted global effort to improve timely access to surgery for these patients is required and calls for investments aimed at refining existing and establishing additional epilepsy centres where needed.

4. Alireza Mansouri, Surgical Oncology Fellow

Brij Karmur, MD Program 2nd year, University of Toronto (Presenter)
Dr. Alireza Mansouri, Surgical Oncology Fellow
Dr. Jerry Ku, Neurosurgery, PGY2
Dr. Mark Bernstein, Neurosurgeon, Toronto Western Hospital

Exploratory analysis into reasonable timeframes for the provision of neurosurgical care in low- and middle-income countries

Background: In low and middle-income countries (LMICs), only 11.8% of neurosurgical care is met. Delays in seeking, reaching, and receiving care may further exacerbate this. Objective analysis of delay and its consequences is contingent on reference to established resource-appropriate acceptable timeframes.
Objectives: To establish an estimate of the landscape of neurosurgical care provided in LMICs and to explore reasonable timeframes for the provision of care at the various stages of the patient-healthcare interaction in LMICs.
Methods: A multi-center international study utilizing consensus input from neurosurgeons at select LMICs was conducted. In phase 1, participants selected neurosurgical procedures performed at their respective centers. In phase 2, based on procedures shared among all LMICs, representative case scenarios were generated, and participants provided input on acceptable time frames for each stage of patient-healthcare interaction: presentation to health services, diagnosis by primary care physician, referral to neurosurgical specialist care, and definitive neurosurgical management.
Results: Across 18 centers, twelve participated in phase 1, and 7 in phase 2. The breadth of neurosurgical procedures offered at various LMICs was broad, similar in scope to HICs, and included pediatric and adult neurosurgery, trauma, degenerative spine, and hemorrhagic stroke. Acceptable timeframes for each phase of care demonstrated a wide range in certain cases; however, the overall trend demonstrated agreement between the participants.
Conclusion: In this exploratory analysis, reasonable timeframes for the provision of neurosurgical care, within the resource constraints of LMICs were identified. If validated, this data can offer objective assessment of delay in neurosurgical care in LMIC.

5. Wesley Rajaleelan, Anaesthesia Fellow

Dr. Wesley Rajaleelan, Anesthesia Fellow

Airway Management in Children with NOMA Sequelae Undergoing Maxillo-Facial Reconstructive Surgery – A Case Series from Medicins Sans Frontieres,Operational centre Amsterdam

Background: NOMA (cancrum oris) is an exclusive disease of childhood characterized by ulcerative necrosis of the maxillo-facial structures, affecting up to 1,40,000 children annually. It is fatal in 80-90% of cases in the acute setting. Survivors are left with disfiguring maxillo-facial deformations that make airway manipulation for reconstructive surgery very challenging. Here, we describe a case series of anaesthetic airway management for children with sequelae of NOMA in sub-Saharan Africa.
Methodology: Over two interventions of Medicines Sans Frontiers(OCA) mission at the NOMA hospital for children, Sokoto, Nigeria, 16 patients, with chronic sequelae of NOMA, underwent maxillo-facial reconstructive surgery. Each patient posed significant airway challenges due to anatomic malformations, trismus, and restricted neck movements. Lack of preoperative imaging and limited resources

added to the challenge. We were able to surmount these with the use of a three tier hierarchial plan – plan A (intended airway management strategy), plan B (secondary management strategy), and plan C (surgical access to the trachea). (Figure 1)
Results: Preoperative work up included measuring thyromental, sternomental, and inter incisor distances, neck movements, and mouth opening. Of the 16 patients in this series, 14 were intubated using plan A. Two required deployment of plan B and none required plan C. We predominantly used fibre-optic and nasal intubation for these patients.
Conclusions: Maxillo-facial reconstructive surgery for NOMA poses a huge challenge to the anesthesiologists, especially in children. Adequate planning, screening, and assessment of the airway with primary, secondary, and back up plans are crucial for successful NOMA intervention. With this strategy in place "cannot intubate, cannot ventilate "situations can be handled during an emergency. Psychological and nutritional rehabilitation is essential prior to surgery..

6. Adriana Di Stefano, Family Medicine, PGY2

Dr. Adriana Di Stefano, Family Medicine, PGY2
Dr. Alissa Tedesco, Family Medicine, PGY2
Dr. Kelly Grant, Family Medicine, University of Toronto

Improving learner comfort in caring for immigrant and refugee patients: A quality improvement project at TEHN (E – Poster)

Background: Flemingdon Health Centre (FHC) is a community health centre that serves a large population of immigrant and refugee patients. For learners, this offers a unique and diverse patient population, and ample experience managing the social determinants of health for patients we serve, and their complex needs. However, family medicine residents receive little orientation and education around these populations, their needs, and the resources available to them.
Objective: To assess the information needs of family medicine residents at FHC on caring for immigrant and refugee patients and create a guide to meet these needs with a goal of improving learner comfort caring for this population.
Methods: Using Quality Improvement methods, we went through PDSA cycles of testing change, from investigating family medicine residents' comfort level, information needs and perceived utility of a guide, to creating the guide, and then evaluating its utility.
Findings: The pre-guide survey showed that the majority (83%) of residents would find a guide helpful (>5/10 on Likert scale). Post-guide survey showed that 100% of residents reviewed the guide. 83% of residents believe the guide would improve efficiency if given at the beginning of PGY1. 100% of residents believe the guide would be useful for incoming PGY1s and should be distributed to new PGY1s.
Conclusions: This guide was created to meet learner needs and was found to have utility in patient care. It has been disseminated with hopes of decreasing inequities in patient care, inefficiencies in providing timely patient care, and increasing competency of learners..

7. Zenita Alidina, Psychiatry, PGY3

Dr. Zenita Alidina , Psychiatry, PGY3
Dr. Zainab Furqan, Psychiatry, PGY3
Dr. Katrina Hui, Psychiatry, PGY2
Dr. Elaine Bradley, Psychiatry, PGY2
Dr. Amy Gajaria, Psychiatry, PGY6

Mental health on the margins: a psychiatry resident-initiated global mental health interest group (E – Poster)

Background: The University of Toronto's psychiatry residency program has a longitudinal didactic curriculum in social and cultural psychiatry. However, limited teaching on global mental health or opportunity for interdisciplinary discussion exists. Objectives: To create and implement a resident-led global mental health and transcultural psychiatry discussion group, and understand its impact on the training of its members.
Methods: A monthly discussion group with an invited expert speaker and a pre-reading around each topic was organized. Group members included researchers, allied health professionals, and residents and staff physicians from multiple specialities. Members were asked to complete an evaluation at the end of each meeting. Completion of surveys was voluntary and anonymous; formal ethics consent was not obtained.
Results: We have 167 members on our growing mailing list. We started in January 2015 and have covered topics including: teaching cross-cultural psychotherapy; psychiatry and international health emergencies; how race, privilege, and inequity affect mental healthcare locally and internationally; faith, religion, and mental health; Aboriginal mental health; and the development of the Consumer-Survivor movement. Issues that have arisen thus far include how to ensure a safe space for discussions, navigating the dichotomy between speaker presentations and participant discussion, whether to host sessions in institutional or more informal settings, and choice of research methodology for program evaluation.
Conclusions: A resident-initiated global mental health discussion group can contribute effectively to global mental health training. Furthermore, it can provide a safe and rich place to foster connections, knowledge, and critical thought important in doing global mental health work.

8. Sara Jassemi, Pediatrics, PGY-5

Dr. Sara Jassemi, Adolescent Medicine, Psychiatry, PGY5
Dr. Mitesh Patel, Department of Psychiatry, Lecturer

Homeless Refugee Youth Perspectives on Mental Health and Resilience: A Qualitative Case Study (E – Poster)

Background: Refugee youth experience high levels of psychological distress (1), and unaccompanied refugee youth are at even greater risk of developing mental health disorders (2,3). For homeless refugee youth, the resettlement stressors can be even more pronounced (4). Homeless refugee youth are underrepresented in the literature. Additionally, there is a paucity of guidelines for services working with this population (5). The impact of these gaps has been felt in Toronto, ON, where the largest number of refugee youth first enter Canada (6). In the last few years, Youth Without Shelter, an emergency residence close to Toronto's major international airport, has seen an emergence of refugee youth represented in their clientele.
Objectives: To describe the recognized and unrecognized mental health needs of homeless refugee youth. To describe the factors that contribute to resiliency amongst homeless refugee youth.
Methods: We will conduct a qualitative case study using thematic analysis of semi-structured individual interviews with youth and staff

at YWS. In the spirit of community relational research, our study will begin with a roundtable focus group with YWS staff where we will present our study aims and methodology and seek feedback. This study has been approved by the Health Science Research Ethics Board at the University of Toronto and the Research Ethics Board at the Centre for Addiction and Mental Health.

Results: In progress.

Conclusion: In progress. This field of research, which examines the intersection of homelessness and adolescence among refugees, is in its early stages. We hope that this study will provide a foundation for future investigation.

References:

1. Bronstein I, Montgomery P. Psychological distress in refugee children: a systematic review. Clinical Child & Family Psychology Review 2011 Mar;14(1):44-56.
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4. Colucci E, Minas H, Szwarc J, Guerra C, Paxton G. In or out? Barriers and facilitators to refugee-background young people accessing mental health services. Transcultural Psychiatry 2015 Dec;52(6):766-790.
5. Couch J. 'Neither here nor there': Refugee young people and homelessness in Australia. Children and Youth Services Review 2017;74:1-7.
6. Immigration, Refugees and Citizenship Canada. Statistics and Open Data. 2017; Available at: http://www.cic.gc.ca.myaccess.library.utoronto.ca/english/resources/statistics/. Accessed 08/15, 2017.

9. Rebecca Rodin, Internal Medicine, PGY1

Dr. Rebecca Rodin, Internal Medicine, PGY1
Dr. George Bonnanno, Department of Psychology, Columbia University
Dr. Adam Brown, Department of Psychiatry, New York University

Coping Flexibility Predicts Posttraumatic Stress Disorder and Depression in Human Rights Advocates (E – Poster)

Background: An emerging body of research on individuals exposed to trauma shows that the ability to flexibly employ different coping styles is associated with better adjustment. Specifically, individuals who use both "trauma-focused" (focusing on the experience and significance of a potentially traumatic event) and "forward-focused" (optimism, helping others, goal-oriented thinking) coping styles exhibit less psychological disturbance after trauma exposure than those with less coping flexibility. The protective effect of coping flexibility has yet to be examined in such professional populations as human rights advocates, who have high rates of exposure to trauma through their work in conflict zones and with victims of abuse.

Objective: To investigate whether greater coping flexibility is associated with less Post-traumatic Stress Disorder (PTSD) and Major Depressive Disorder (MDD) in an international sample of human rights advocates.

Method: In an online, cross-sectional study, 346 international human rights advocates completed self-reported measures of PTSD, MDD, trauma exposure, and the Perceived Ability to Cope with Trauma (PACT) scale.

Results: Coping flexibility was associated with lower rates and symptom severity of PTSD and MDD. Whereas both trauma-focused and forward-focused coping were associated with lower rates of PTSD, the inverse relationship between coping flexibility and MDD was driven primarily by less forward-focused coping.

Conclusion: These findings are the first to show that lower levels of coping flexibility may be an important factor underlying vulnerability to PTSD and MDD among human rights advocates. Longitudinal studies are needed to clarify whether coping flexibility can mitigate the potential negative mental health impact of traumatic stress over the course of one's career in international human rights advocacy.

10. Alissa Tedesco, Family Medicine, PGY2

Dr. Alissa Tedesco, Family Medicine, PGY2

The Good Wishes Project: An end-of-life intervention for individuals living in homelessness

Background: Persons living in homelessness face high morbidity and mortality. Despite their complex needs, this population has poor access to palliative care. To address this, interventions need to be comprehensive, flexible and creative. The Good Wishes Project, a partnership between the Inner City Health Associates' PEACH (Palliative Education and Care for the Homeless) program and Haven Toronto, funded by the Sovereign Order of St. John of Jerusalem, facilitates granting wishes to individuals living in homelessness with a goal of enhancing comfort and personalizing the end-of-life experience.
Objective: To elicit provider perspectives on the utility of the Good Wishes Project in the delivery end-of-life care to this population.
Methods: For this mixed methods study, semi-structured interviews were conducted with health and social service professionals (n=7) in shared care with PEACH. Interviews were recorded, transcribed and analyzed thematically. Good Wishes Project participant information and wish data was collected anonymously and analyzed using descriptive statistics.
Results: At 14 months after the project's launch, there were a total of 27 participants and 40 wishes made, 24 of which had been granted. Wishes were classified into 5 categories: basic necessities, end-of-life preparations, personal connections, paying it forward and leisure. From the provider perspective, the project was found to have utility in 4 main domains: establishing and enhancing connection, prioritizing the patient's agenda, promoting dignity, and satisfying basic needs.
Conclusion: The Good Wishes Project is a promising psychosocial intervention in providing palliative care to individuals living in homelessness, whose lives have largely been burdened with marginalization.

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