11th EDITION

MUHC GLOBAL SURGERY

The Building Blocks of Global Surgery

HYBRID EVENT

01 APRIL 2023

Conference Booklet

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Amanda Bianco

MDCM 2024 Candidate
McGill CGSTA Chapter Co-President

About the Conference

The McGill University Health Centre (MUHC) Global Surgery Conference is a student-led conference that occurs annually to expose trainees to global surgery leaders and ongoing projects around the world. The 11th edition of the conference is being held in hybrid format (in person and virtual) and open to all trainees locally and internationally. The theme this year is The Building Blocks of Global Surgery. The conference includes talks and workshops around education, advocacy, innovation, ethics and research in global surgery. It also includes a session for poster presentations highlighting advances in global surgery research. We would like to thank our sponsors (McGill University, The Montreal General Hospital Foundation, Global Health Programs, Centre for Global Surgery, Royal Bank of Canada, Pizza Hut, Quesada) for their generosity in making this conference a reality. We would also like to thank you for attending the conference this year, and we hope that you enjoy it!

Welcome

Welcome to the 11th annual MUHC Global Surgery conference! I am very excited to be here with you today to discuss, enhance and renew a passion for building accessible and sustainable surgical systems locally and globally with trainees and leaders in the field.

A warm welcome to our invited visiting professor Dr. Shery Wren from the Division of General Surgery at Stanford University, and to all our invited speakers, judges, and poster presenters. Thank you for making the time for this, your presence at this conference is what allows us to create a space for trainees to learn, be inspired, and aspire to be the next global surgery leaders. Last but not least, welcome to all trainees attending in-person or virtually. Your presence here today is testimony to your commitment to bettering surgical systems across the globe. Enjoy the conference as we immerse in a day full of inspiring talks, workshop and scholarly work.

Soukaina Hguig

MDCM 2023 candidate
McGill CGTA Chapter Co-President

I would like to thank the organizing committee members for their phenomenal work to help make our annual conference happen.

Nour Kabbes
Hamza Ahmad
Sirine Guetiti
Peter Malik
Jimin Lew
Nardin Farag

Conference Segments

The conference aims to provide trainees with an overview of various aspects of global surgery that constitute the building blocks of effective and sustainable surgical systems.

BLOCK 1 : GLOBAL SURGERY

The focus of this block is on education, research, and advocacy as key components.

Based on the surgathon model

BLOCK 2 : INNOVATION

Innovation, as a multidisciplinary approach to problem-solving, reveals to be essential to build better systems.

Based on the surgathon model

BLOCK 3 : ETHICS

This block will focus on promoting community empowerment and enhancing capacity building as central themes.

Based on the surgathon model

SCHEDULE

8:30 - 9:00 AM EST | **Registration and Seating**

9:00 - 9:30 AM EST | **Opening Remarks by the Co-Directors of the McGill Center for Global Surgery**

- Dr. Dan Deckelbaum & Dr. Tarek Razek

9:35 - 10:05 AM EST | **Keynote Address** - **Finding the Forgotten Women**

- Dr. Sherry Wren

10:10 - 10:40 AM EST | **A Step Towards Equitable Surgical Care: Sustainable Partnerships**

- Dr. Emilie Joos

10:45 - 11:15 AM EST | **Importance of Interdisciplinary Collaboration in Global Surgery**

- Ms. Nancy Branco (RN)

11:20 AM - 12:20 PM EST | **Lunch**

12:25 - 1:35 PM EST | **Research Sesion with Poster Presentations and Q&A**

1:40 - 2:45 PM EST | **Innovation in Global Surgery - Workshop**

- Dr. Fabio Botelho

2:50 - 3:20 PM EST | **Networking Session**

3:25 - 3:55 PM EST | **Strategies for Trainees to Become Effective Global Surgery Advocate**

- Dr. Xiya Ma

3:55 - 4:00 PM EST | **Closing Remarks**

MEET OUR SPEAKERS

Dr. Sherry M. Wren - Keynote Speaker

Professor Wren serves as Professor and Vice Chair for Surgery at the Stanford School of Medicine, Director of Global Surgery at the Center for Innovation and Global Health, and Director of Surgery at the Palo Alto Veterans Health Care System. She is the Secretary of the American College of Surgeons, Professor Extraordinary at the Centre for Global Surgery, Stellenbosch University, South Africa, former Honorary Professor in the Centre for Trauma at the London School of Medicine, Queen Mary University of London, and Adjunct Professor at Uniformed Health Services University in Bethesda, MD. Dr. Wren is a member and in the leadership of numerous national and international organizations and has served on the boards of the Society of American Gastrointestinal and Endoscopic Surgeons, American College of Surgeons, and other surgical societies. She has current and past membership on the editorial boards of JAMA Surgery, World Journal of Surgery, Surgical Endoscopy, Journal of Laparoendoscopic Surgery and Advanced Techniques, and East and Central African Journal of Surgery. Her clinical practice is in general surgery with a fellowship in hepatobiliary surgery. Current clinical focus is gastrointestinal malignancy and surgical robotics. Research interests are in surgical outcomes, robotics, cancer, and global/humanitarian surgery. Dr. Wren has also worked with Doctors Without Borders/ Médecins Sans Frontières.

Dr. Dan Deckelbaum
Co-director of the MUHC Centre for Global Surgery

Dr. Deckelbaum is an assistant professor at the Divisions of Trauma and General Surgery at the McGill University Health Centre, an associate member of the Department of Epidemiology, biostatistics and occupational health at McGill University, and an honorary associate professor of the National University of Rwanda. Dr. Deckelbaum completed his medical degree at McGill University in 2003, followed by a residency in General Surgery at the same institution. He completed a subspecialty training in trauma surgery and critical care at Jackson Memorial Hospital in Miami and obtained a Masters of Public Health at the University of Miami in parallel. Dr. Deckelbaum's passion for global health stems from his firsthand clinical experience in government hospitals throughout East Africa, as well as his involvement in disaster response efforts in Somalia, Kenya, Turks and Caicos, and Haiti. Dr. Deckelbaum's research interests focus on enhancing surgical education and progress on a global scale, as well as preparing and responding to disasters in regions with restricted resources. He has published over 80 peer-reviewed articles in leading medical journals and has presented his work at numerous national and international conferences. Dr. Deckelbaum is also dedicated to identifying and implementing innovative methods to improve the education of medical students in the field of global surgery. Dr. Deckelbaum has contributed to the creation of virtual training for Ukraine medical professionals related to basic life support and emergency life-saving procedures.

MEET OUR SPEAKERS

Dr. Tarek Razek

Director of the Adult Trauma Program at the MUHC

Dr. Razek completed his medical degree at McGill University in 1993. He then completed his surgical residency and subsequently pursued further specialization in trauma surgery. Dr. Razek completed his trauma and surgical critical care fellowship in 2000 at the University of Pennsylvania. He initially became involved in global surgery through his participation in medical educational programs conducted by the Canadian Network for International Surgery (CNIS) in Tanzania and Ethiopia. Over the last decade, Dr. Razek has remained committed to developing and participating in medical education programs, with a particular emphasis on the Trauma Team Training program. Dr. Tarek Razek's dedication to global surgical issues and disaster response has been demonstrated through his involvement in various leadership roles. He has served as Chair of the Board of the Canadian Network for International Surgery (CNIS), which supports surgical, obstetric, and injury prevention programs across sub-Saharan Africa. Dr. Razek has also been active in disaster response efforts at the regional, national, and international levels, having chaired the disaster committee for the Trauma Association of Canada and provided surgical support during the 2010 Vancouver Olympics, and was consulted for the preparations of the Euro 2012 in Ukraine.

Dr. Emilie Joos

Associate Director of the UBC Branch for International Surgical Care and Trauma and Acute Care Surgery Fellowship Program Director

Dr. Joos completed her M.D., C.M. degree at McGill University in 2007 and a residency in general surgery at Laval University in 2012. Dr. Joos also completed a fellowship related to Trauma and Surgical Critical Care at the University of Southern California/Los Angeles County Hospital and a Masters in Global Health Policy at the London School of Hygiene and Tropical Medicine. She has been working with Médecins Sans Frontières since 2015 and was deployed to work in Congo, Haiti, and Central African Republic. Dr. Joos obtained her Critical Care accreditation in 2014 and completed an Emergency Response Unit training with the Canadian Red Cross in 2017. She is also the course director for Advanced Surgical Skills for Exposure in Trauma, Definitive Surgical Trauma Care, and Advanced Trauma Life Support courses and serves as the provincial chair for ATLS in British Columbia.

MEET OUR SPEAKERS

Ms. Nancy Branco

Nancy Branco is the Interim Trauma Program Manager at the Montreal General Hospital from the McGill University Health Centre (MGH-MUHC) in Montreal, Canada. She is a licensed nurse in Quebec and received her Master's Degree in Nursing (Teaching focus) from Athabasca University in 2016. Since 1998, Nancy has performed several roles at the MGH in a clinical capacity (emergency and perianesthesia) and also as a research nurse (in the fields of genetics, cardiology, and rheumatology/immunology). Along with her duties on the Trauma Service, she is also a Trauma Nursing Core Course Instructor. Past certifications obtained :CNA emergency nurse; CTAS; BCLS; ACLS, and Good Clinical practice in clinical research. Nancy has lectured locally and nationally on different nursing topics, and participated in several published articles. She is active in a variety of nursing organizations, including the Quebec Perianesthesia Nurses Association, the National Emergency Nurses Association, and the Emergency Nurses Association and now recently joined the Trauma Association of Canada. Nancy has contributed in a multitude of committees at the MGH-MUHC towards improvement of patient care.

Dr. Fabio Botelho

Dr. Botelho obtained his medical degree in 2010 at Universidade Federal de Minas Gerais in Brazil. Dr. Botelho is the Jean-Martin Laberge Global Pediatric Surgery Fellow at the Montreal Children's Hospital and is currently pursuing a Ph.D. in Experimental Surgery at McGill University. Dr. Botelho's research interests focus on improving the quality of care related to pediatric trauma surgery in middle and low resources countries using virtual reality and collaborates with medical societies to develop a global pediatric trauma course. Additionally, Dr. Botelho is an American College of Surgeons trauma instructor, a full member of the Brazilian College of Surgeons and the Brazilian Pediatric Surgical Association, and collaborates with the Program in Global Surgery and Social Change at Harvard Medical School.

Dr. Xiya Ma

Xiya is a plastic and reconstructive surgery resident from Université de Montréal with a passion for research, innovation and global health. She completed her thesis on peripheral nerve synaptogenesis, funded by the Canadian Institutes of Health Research, and published over 20 peer-reviewed articles. Xiya led the International Student Surgical Network (InciSioN), the world's largest trainee-led global surgery organization, for two years, where she carried high-level advocacy work at the World Health Assembly and organized one of the largest virtual global surgery symposiums. She represented the Canadian Medical Association at TEDMED 2018, the global community on innovation in health care, and curated the TEDMED 2020 program as a research scholar. Xiya is the recipient of the Mary and Brendan Calder Award from the Canadian Medical Hall Of Fame and the Canada 150th Anniversary Medal for Saint-Laurent for her leadership and community involvement.

ABSTRACTS

Whether virtual or in person, each poster presentation is scheduled to be 3 minutes in duration, followed by a 2 minute question and answer period. Our judges for the poster presentation session are as follows:

Dr. Sherry Wren - General Surgeon, Stanford University.
Dr. Sherif Emil - Pediatric Surgeon, McGill University.
Dr. Andrew Zakhari - OBGYN, McGill University.

Prizes will be awarded to the best presentations.

1 - (**Virtual)** *Regional Access To Kidney Transplantation Services In Brazil: A Retrospective Cross-Sectional Study 2018-2022,* **Presenter: Laynara Vitória da Silva Vieira (Federal University of Piauí)**

2 - (**Virtual)** *Colon Cancer In Brazil: A 10-Year Retrospective Analysis Of Diagnosed Patients,* **Presenter: Any Cristhina Guedes Gotardi (Centro Universitário Maurício de Nassau Cacoal)**

3 - (**Virtual)** *Global Surgery Initiative For Surgical Education, Practice, And Research: The Greek Perspective,* **Presenter: Sofia Rozani (National and Kapodistrian University of Athens)**

4 - (**Virtual)** *Development In Brazil Of Craniopagus Separation,* **Presenter: Gabriel de Moraes Mangas (Universidade Federal Fluminense)**

5 - (**Virtual)** *Beyond the Blast: Why Civilian Explosive Violence Injuries Must Be Prioritized In Armed Conflict Settings; A Blast Injury Management Centre of Excellence Framework Proposal,* **Presenter: Kathryn Keeley Campos (King's College London, University of Washington)**

6 - (**Virtual)** *The Use Of Pre-Operative Checklist For The Prevention Of Surgical Errors In Low And Middle Income Countries (LMICs) Population,* **Presenter: Shaamalan Murugaya (MAHSA University)**

7 - (**Virtual)** *Palatal Obturator for Management of Cleft Palate,* **Presenter: Dawn Curran (Memorial University of Newfoundland)**

8 - (**In Person)** *Field Testing of Amber: A Novel Trauma Registry for Streamlining Injury Surveillance in Tanzania*, **Presenter: Ali M. Fazlollahi (McGill University)**

9 - (**In Person)** *Black-Vs-White Racial Disparities In 30-Day Outcomes Following Revisional Bariatric Surgery: An MBSAQIP Database Analysis,* **Presenter: Soomin Lee (University of Toronto)**

10 - (**In Person)** *Improving the Quality of Trauma and Acute Surgical Care in Nunavik: A Comparison of Trauma Registries,* **Presenter: Lilly Groszman (McGill University)**

ABSTRACT #1

Regional Access To Kidney Transplantation Services In Brazil: A Retrospective Cross-Sectional Study 2018-2022

Presenter: Laynara Vitória da Silva Vieira, Federal University of Piauí

BACKGROUND: Kidney transplantation is a well-established procedure in Brazil, with over 5,000 transplants performed annually. However, it is still controversial whether this access happens equally in all regions. Efforts are needed to identify and prevent these supposed regional disparities.

METHODS: A retrospective cross-sectional study was conducted in Brazil using secondary data from the Brazilian Unified Health System's IT department (DATASUS) between January 2018 and December 2022. The study aimed to investigate the accessibility of kidney transplantation services across Brazilian regions by comparing the patient's place of residence and the place of hospitalization based on the STROBE checklist. The study was based on the PICo principle, focusing on people undergoing kidney transplantation in Brazil from 2018 to 2022 (P), kidney transplantation (I), and Brazilian regions (Co). The analysis aimed to determine whether patients had to travel to a different state to access the procedure or whether they could receive treatment in their own state of residence. The statistical analysis was conducted using PAST 4.12, ANOVA, and Tukey's Pairwise comparison tests.

RESULTS: Out of the total of 23 429 kidney transplant admissions, the North, Northeast, and Midwest regions of Brazil fell short of meeting the demand for kidney transplant procedures in their respective regions. The North region had 553 patients but only 216 surgeries, the Northeast region had 4 412 patients but 4 098 surgeries, and the Midwest region had 1,479 patients but only 1 061 surgeries. On the other hand, the South (5 166 patients, 5 670 surgeries) and Southeast (11 819 patients, 12 382 surgeries) regions had more surgeries than the demand in their population, resulting in procedures being performed on patients from other states and regions.

CONCLUSION: Access to kidney transplantation in Brazil is uneven across regions. To guarantee access to surgical procedures in low- and middle-income countries in a safe, timely and affordable way, in accessing the health system in different regions, equity must be at the center of national and international planning for kidney transplantation.

ABSTRACT #2

Colon Cancer In Brazil: A 10-Year Retrospective Analysis Of Diagnosed Patients

Presenter: Any Cristhina Guedes Gotardi, Centro Universitário Maurício de Nassau

AIM: Colorectal cancer is a disease with a high incidence and mortality rate worldwide. Thereby, this study aims to build an epidemiological profile of colon cancer in Brazil in the last 10 years.

METHODOLOGY: This is a 10-year cross-sectional and retrospective study with public data from the Brazilian Unified Care System (SUS) information of incidence and mortality rate from all colon cancer cases diagnosed in Brazil, from December 2012 to November 2022. It analyzed data about gender, age group and skin color/ethnicity.

RESULTS: During the period, 461,476 cases of colon cancer were registered. There was a discreet predominance of females, both in incidence (50.3%) and mortality (8.38%). The largest number of cases occurred in patients aged 60 to 69 years (29%). Although, ages above 80 years had a higher number of deaths (20.6%). There was a higher incidence in white people, corresponding to 55% of all cases. However, indigenous race, despite having the lowest absolute proportion of cases, was related to the highest overall mortality rate (13.7%) mainly in females (18.37%) when compared to others. In males, mortality was higher in black individuals (9.75%).

CONCLUSION: Therefore, a higher mortality of indigenous people was observed to the detriment of other races. The restricted health care of this population is clear, which leads to a worse prognosis due to the delay in confirming the disease. Furthermore, elderly individuals also have a considerable mortality rate, demonstrating the importance of screening for early detection of the disease, improving the prognosis.

ABSTRACT #3

Global Surgery Initiative For Surgical Education, Practice, And Research: The Greek Perspective

Presenter: Sofia Rozani, National and Kapodistrian University of Athens

AIM: To evaluate the familiarity of Greek medical students and physicians of surgical specialties/anaesthesiology with the concept of Global Surgery.

METHODS: A web-based questionnaire was designed using Google Forms and sent to Greek physicians and medical students of all medical schools. It consisted of several sections aimed at assessing surgeons' and medical students' prior knowledge about the perspectives and ultimate objectives of Global Surgery.

RESULTS: A total of 93 respondents (46 medical students, 46 surgical physicians, average age 31 years) answered the questionnaire. About seventy per cent were unaware of the concept of Global Surgery, while only 26.4% were familiar with this worldwide concept. Unawareness of Global Surgery was more common among medical students (89.13%) than among medical doctors (53.19%).

CONCLUSION: There was a wide unawareness about Global Surgery's objectives and perspectives, as far as both Greek medical students and surgeons/anesthesiologists were concerned. The international collaboration of major surgical clinics and reference research centers for practical and research training, as well as the reinforcement of academic and research relations, would promote the Global Surgery Initiative's principles in Greece.

ABSTRACT #4

Development In Brazil Of Craniopagus Separation

Presenter: Gabriel de Moraes Mangas, Universidade Federal Fluminense

INTRODUCTION: Craniopagus twins union can occur in any part of the skull. The junction of craniopagus twins is rarely symmetrical and can influence the development of the structures of the head. Objective: To elucidate the main difficulties encountered during the surgical separation of craniopagus twins in the pre-, intra-, and post-operative periods.

METHODS: A database search was performed for articles on craniopagus twins from 2000 to 2023 in three databases: Medical Literature Analysis and Retrieval System Online (MEDLINE), Latin American and Caribbean Health Sciences Literature (LILACS), and Scientific Electronic Library Online (SciELO). The search used the descriptors "craniopagus twins" and "gêmeos craniópagos".

RESULTS: A total of 4 articles were found, with 3 from LILACS and 1 from MEDLINE. Winston et al. pointed out that adequate support should be provided to avoid gravitational forces on the brain during separation surgery. Gas embolism is also a concern during separation. Any external pressure on the jugular veins should be carefully avoided as it can increase venous pressure and consequently cerebral bleeding and edema. The relative position of the twins during induction of anesthesia and surgery can cause some degree of "transfusion" from one twin to the other. Adrenal dominance is important in any type of conjoined twinning, and the twin with adrenal suppression may require steroid supplementation before and during surgery.

CONCLUSION: In the craniopagus separation procedure it is essential to provide support throughout the surgical process. Several challenges are inherent in this procedure, but all preventable difficulties should be avoided.

ABSTRACT #5

Beyond the Blast: Why Civilian Explosive Violence Injuries Must Be Prioritized In Armed Conflict Settings; A Blast Injury Management Centre of Excellence Framework Proposal

Presenter: Kathryn Keeley Campos, King's College London, University of Washington

BACKGROUND: Civilians in armed conflict settings bear a significant burden of blast-injury-related mortality and morbidity. Due to severe resource and security constraints, local healthcare workforce and humanitarian actors experience momentous challenges in being able to provide civilian ballistic injury care. The goal of this study was to establish a blast injury management centre for excellence framework proposal.

METHODS: A systematic review was performed to identify records and interventions aimed toward implementing relevant civilian blast injury management, trauma response, and clinical management interventions over a 20-year period (2002-2022). Interventions from reports were then classified to establish the proposed framework.

RESULTS: A total of 353 records. 23 eligible reports were selected for review. Lessons describing ballistic civilian injury management, triage, and clinical training interventions from point of injury to rehabilitation were identified. Our framework proposal addresses clinical management, workforce training, resource, surveillance, infrastructure, and facility needs in order to enhance access to ballistic injury care.

CONCLUSION: Currently, efforts to establish a civilian blast injury management centre for excellence program for surgical capacity building in austere environments remain unestablished. Efforts to bolster civilian blast injury management interventions in armed conflict settings are imperative in order to reduce civilian mortality and improve patient outcomes during wartime. Ideally, this framework proposal would be utilized broadly by agencies like MSF, ICRC, and local healthcare actors operating in armed conflict settings. Further development and piloting of the proposed framework should be considered.

ABSTRACT #6

The Use Of Pre-Operative Checklist For The Prevention Of Surgical Errors In Low And Middle Income Countries (LMICs) Population

Presenter: Shaamalan Murugaya, MAHSA University

BACKGROUND: As surgical volume increases globally and exceeds 313 million surgical procedures annually, mortality due to treatable surgical conditions is still high in lower-income and middle-income countries (LMICs) due to many global health challenges. With the introduction of a pre-operative checklist, a notable improvement in surgical outcome is expected especially in LMICs population.

METHODS: A search of articles describing the use of the WHO pre-operative checklist and the outcome of it in LMICs using the PUBMED database was conducted from January 2009 to January 2022. Data on pre-operative checklist measures were recorded in pre-intervention and post-intervention stages with the relative improvement of the surgical outcome. A total of 14 articles out of 548 articles were included for the final review after a screening process based on inclusion and exclusion criteria was done.

RESULTS: An increase in relative improvement during the post-intervention phase with the usage of the WHO pre-operative checklist has been seen. The surgical checklists were associated with increased detection of potential safety hazards, decreased surgical complications and improved communication among operating staff. The important measure seen was a decline in mortality by 4.3% in those who completed the pre-operative checklist implies how crucial the checklist affects the patient's safety in LMICs.

CONCLUSION: The pre-operative checklist is relatively simple and shows a promising strategy to address surgical patient safety. Our study shows that the parameters reviewed contributed significantly to prevent surgical errors in the LMIC population.

ABSTRACT #7

Palatal Obturator for Management of Cleft Palate

Presenter: Dawn Curran, Memorial University of Newfoundland

AIM: Palatal obturators are offered as management of cleft palate (CP) to patients who are unable or unwilling to undergo surgical correction, especially in low-resource regions of the world. The purpose of this pilot study was to investigate whether the use of a palatal obturator is a viable management option for cleft palate patients.

METHODS: A systematic review of published literature was carried out by two independent reviewers. Articles written in English, or studies whose outcomes contained the use of an obturator for treatment of an unrepaired or failed surgically repaired cleft palate were included.

RESULTS: 15 studies were included in the review. Twelve studies were single-patient case reports. Follow-up was either not reported or less than two years following intervention in thirteen studies. Most articles reported improvement in speech and nasal regurgitation. However, 87% had no formal or validated outcome measurements.

CONCLUSION: No studies reported standard or validated outcomes of palatal prosthesis, indicating there is a paucity of evidence to support their use as definitive management in CP patients. If palatal obturators are to be offered as management of cleft palates in low-resource areas more rigorous study is needed.

ABSTRACT #8

Field Testing of Amber: A Novel Trauma Registry for Streamlining Injury Surveillance in Tanzania

Presenter: Ali M. Fazlollahi, McGill University

BACKGROUND: Injuries are among the most common causes of death worldwide and 90% of injury deaths occur in Low- and Middle-Income Countries (LMICs). Part of this problem is the lack of capacity for large-scale injury surveillance programs within resource-limited regions. Trauma registries are evidence-based tools that guide effective injury prevention campaigns and have shown to be successfully implemented in LMICs including Tanzania. A novel trauma registry, Amber, was developed by the Centre for Global Surgery to enhance the capacity of the existing system in Tanzania.

AIM: Conduct field testing of Amber's functionality in Tanzania, collect and analyze preliminary data, and gather local stakeholders' feedback.

METHODS: After beta-testing at the Montreal General Hospital, Amber was introduced to the Muhimbili Orthopaedic Institute (MOI) in Dar-es-Salaam and the Morogoro Regional Hospital in Morogoro. All 91 functions of Amber were tested with the sites' connectivity and devices, feedback was gathered from semi-structured interviews with local staff, and data from 2022-07-01 to 2022-07-07 was collected.

RESULTS: Amber received a positive response by offering significant financial and time-efficient advantages. Enabling updates and providing Swahili translations were the key suggestions for the development team. Retrospective data from 141 anonymized patients (mean age [SD], 32.1 [19.5] years) demonstrated that most were male (n=112, [79.4%]), had a primary level of education (n=64, [45.4%]), and were self-employed (n=77, [54.6%]). The most common causes of injury were motor vehicle collisions (n=81, [57.5%]), falls (n=45, [31.9%]), and crush injuries (n=7, [4.9%]).

CONCLUSION: Amber is a user-friendly system with interest and capacity for deployment in Tanzania. As a secure platform with streamlined data access to authorized local leadership, Amber offers an equitable solution for mitigating the burden of trauma in LMICs.

ABSTRACT #9

Black-Vs-White Racial Disparities In 30-Day Outcomes Following Revisional Bariatric Surgery: An MBSAQIP Database Analysis

Presenter: Soomin Lee, University of Toronto

BACKGROUND: Previous studies demonstrated Black-vs-White disparities in postoperative outcomes following primary bariatric surgery, including higher complication, readmission, and mortality rates1-5. With revision bariatric surgery becoming more common, accounting for 17% of American bariatric cases in 20196, there is a need to examine racial disparities in revisional surgery outcomes. Thus, we compared postoperative outcomes of Black-vs-White adults who underwent revisional bariatric surgery.

METHODS: We conducted an observational cohort study of adults who underwent revision Roux-en-Y gastric bypass, sleeve gastrectomy, duodenal switch, or one-anastomosis gastric bypass in the United States and Canada using the 2015-2020 MBSAQIP database. Propensity score was used to 1:1 match Black and White patients across 19 covariates. McNemar's test with Benjamini-Hochberg procedure was used to compare 11 postoperative outcomes modeled in the MBSAQIP semi-annual reports and mortality between matched cohorts.

RESULTS: We identified 10,838 Black and 37,075 White patients who underwent revisional bariatric surgery and 21,314 patients were matched. There were no significant Black-vs-White differences in mortality, morbidity, all-occurrence morbidity, all-cause reoperation, related reoperation, all-cause intervention, related intervention, serious event, and bleeding. Interestingly, Black patients experienced higher rates of postoperative all-cause readmission (p=0.005) and related readmission (p=0.011), but lower rates of surgical site infection (p=0.036).

CONCLUSION: Overall, postoperative outcomes were similar between Black and White adults who underwent revisional bariatric surgery, which differ from previous findings of racial disparities in primary bariatric surgery. Further elucidating the differences between primary and revisional bariatric surgery may provide insights into addressing the racial disparities demonstrated after primary bariatric procedures.

ABSTRACT #10

Improving the Quality of Trauma and Acute Surgical Care in Nunavik: A Comparison of Trauma Registries

Presenter: Lilly Groszman, McGill University

BACKGROUND: Delivering trauma and acute surgical care to the population of Northern Quebec presents unique challenges. The region's vast and thinly populated geography, harsh weather conditions, limited resources, and fragmented transport infrastructure all pose significant challenges in delivering optimal care. Furthermore, government databases do not routinely capture information about injured patients in Nunavik. To address this gap, our study aimed to collect onsite data to better understand the epidemiology of trauma in Nunavik and compare it with the information recorded when these patients are transferred to our level-1 trauma center in Montreal.

METHODS: We retrospectively reviewed all on-site medical records of trauma patients between January 2015 to December 2021 presenting to Kuujjuaq's Centre de Santé Tulattavik de l'Ungava (CSTU) and Puvirnituq's Inuulitisivik Health Centre (IHC). Patient demographics, injury and transfer characteristics, and modifiable risk factors (e.g. seatbelt use, alcohol consumption) were collected. A comparison of variables between the Montreal General Hospital (MGH) trauma registry and the onsite Nunavik registry was performed using t-test, Pearson's chi-squared test and Fisher's exact test as appropriate.

RESULTS: Among 794 trauma patients presenting to the included centers in the study's time frame taken from the Nunavik database and 366 trauma patients that were transferred to the MGH from Nunavik, the mean age of patients up North was 26[18,42] years and 33[23,48] in the MGH database ($p<0.001$). Males represented 48.9% of the Nunavik cohort and 61.20% ($p<0.001$). The most common mechanism for the Nunavik cohort of injury was motor vehicle collision (N=264, 33.2%), followed by blunt assault (N=263, 33.1%), and then fall (N=140, 17.6%). Among the trauma patients that were transferred to the MGH from Nunavik, the most common mechanism of injury was a motor vehicle collision (N=127, 34.7%), followed by fall (N=77, 21.0%) and blunt assault (N=77, 21.0%). Of the 366 cases in the MGH Trauma registry, 101 (27.60%) were also included in the Nunavik registry. When comparing the MGH to the Nunavik registry, trauma patients treated in Nunavik had a higher initial GSC Score (15 [15,15] vs. 13 [0,15] ($p<0.001$).

CONCLUSION: The study offers a comprehensive overview of the trauma epidemiology in Nunavik, which is not fully reflected in government databases and differs significantly from the data captured in our level-1 trauma center registry. By addressing the gap in knowledge regarding the care of an underserved population, this study highlights potential areas for policy and practice improvements, ultimately leading to better trauma outcomes. Specifically, the study emphasizes the need for enhanced documentation practices for patients from Northern Quebec.

STAY CONNECTED

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CGSTA
Canadian Global Surgery Trainees' Alliance
The InciSioN National Working Group for Canada

Subcribe to the CGSTA's Newsletter

CGSTA's Monthly Newsletter features upcoming and past events hosted by the local chapters, various educational and research opportunities as well as current advocacy campaigns. It is released every 15th of the month to students, faculty and programs.

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