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68th Annual CARPHA Health Research Conference

VIOLENCE IN THE CARIBBEAN:
A Public Health Crisis

April 25–27, 2024

ROYALTON CONFERENCE CENTRE
Royalton Saint Lucia Resort, St Lucia

In-person Conference

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Caribbean Public Health Agency

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PANDEMIC FUND
CARPHA Regional Proposal

Reducing the Public Health Impact of Pandemics in the Caribbean through Prevention, Preparedness, and Response [RG-T4387] Project

ABOUT THE PANDEMIC FUND

The Pandemic Fund (PF) is the first multilateral financing mechanism dedicated to providing multiyear grants to help low- and middle-income countries become better prepared for future pandemics. The PF's First Call for Proposals provides additional financing to strengthen pandemic prevention, preparedness and response (PPR) capabilities, and address critical gaps in countries through investments and technical support. It is expected to support and reinforce capacity building and implementation of PPR under the IHR (2005) and other frameworks, consistent with the One Health approach.

In its First Call, 19 proposals were selected; one of which is the Caribbean Public Health Agency (CARPHA)'s regional proposal (the only regional proposal chosen).

CARPHA, the lead regional public health agency and an expression of Caribbean Cooperation in Health, is mandated by its Inter-Governmental Agreement to support its 26 CMS in bolstering national systems and coordinating regional response to public health threats. CARPHA is competent in all three areas of PPR and has a successful track record of same, as demonstrated by its successful regional COVID-19 response. CARPHA has established programmes for PPR coordination (Communicable Diseases, Emergency Response, Tourism and Health, Food-borne, Vector-borne, Field Epidemiology) and serves as the Regional Reference Laboratory. CARPHA works with regional and international agencies and uses regional mechanisms for coordinating its public health response work.

CARPHA's regional entity proposal was successfully selected in July 2023 for the first round of PF financing, with CARPHA as the Executing Agency and the Inter-American Development Bank (IDB) as the Implementing Entity. This regional project, with CARPHA as the beneficiary and CARPHA Member States (CMS) as the participants, serves to support CARPHA in reducing the public health impact of pandemics in the Caribbean region, whilst building pandemic PPR through strengthening i) disease surveillance and early warning systems (EWS), ii) laboratory systems and iii) workforce capacity, regionally at CARPHA and at country levels.

A landmark Public Signing Ceremony for the PF Technical Cooperation Agreement ("Reducing the Public Health Impact of Pandemics in the Caribbean through Prevention, Preparedness, and Response" [RG-T4387] Project) was held on December 14, 2023, at the Hilton Trinidad and Conference Centre (pictured above). Additionally, on March 15th 2024, CARPHA fulfilled the IDB's nine conditions prior to first disbursement, achieved full eligibility and now, is eligible for first disbursement.

PROJECT AT A GLANCE

Goal: Reduced Public Health Impact of Pandemics in the Caribbean Region

OUTCOME 1: Demonstrated capacity to prevent detect and respond to outbreaks	OUTCOME 2: Increased cooperation in the Caribbean region for preparedness and response efforts	OUTCOME 3: Sustained and/ or increased investments in domestic and external PPR funding	OUTCOME 4: Effective stewardship or pandemic preparedness funds

CONTENTS

Editorial

Violence in the Caribbean: A Public Health Emergency

E Ward and H Sutton

Author Affiliation
Citizen Security Plan of Jamaica

Over the last few decades, the Caribbean has been a leader in Health. This is reflected in the success with Alma Ata Health for All, Caribbean Corporation in Health I and II, improved Immunization rates in children, Chronic Disease control, HIV Prevention, Epidemics (management of Dengue, Chikungunya, Zika), and more recently the COVID-19 pandemic. However, another epidemic is growing and increasingly threatening to erode our health care gains, that is, the epidemic of violence. Caribbean countries have shown consistently high homicide rates with an average of 28.4 per 100,000, nearly five times the estimated world homicide average (5.8 per 100,000) (*Table 1*). Moreover, the rate has increased 20% over the last decade. Jamaica accounts for over half (56% of homicides) in the Caribbean, but of major concern is the doubling of homicide rates in some of the smaller islands since 2020. Just one homicide in smaller, close-knit Caribbean communities has a direct impact on an entire population. The trauma and fear impacts wellbeing, health, and investment widely across society. The proliferation of firearms makes the violence more lethal, for example, in Jamaica, 84 % of homicides are gun-related compared to 67% for the Americas. (1)

Table 1 - Homicides for Caribbean Countries 2022

Country	Cases	Rates per 100,000	Year
Antigua and Barbuda	10	10.7	2022
Bahamas	128	31.2	2022
Belize	113	27.9	2022
Barbados	43	15.3	2022
Jamaica	1508	53.3	2022
Saint Lucia	66	36.7	2022
Trinidad and Tobago	605	39.5	2022
Saint Vincent and the Grenadines	42	40.4	2022
Dominica	10	13.8	2021
Grenada	5	4.0	2021
Guyana	131	16.3	2021
Saint Kitts and Nevis	14	52.1	2021

Costs to the Health Services

It is estimated that Caribbean countries lose 3.7% of GDP due to crime, and in addition, crime-related losses represent 5–15% of annual sales for the private sector (2). Our health services, facilities and providers are overburdened with violence related injuries and fatalities. In Jamaica, the impact on the health services has been documented in the Cost of Care Study across seven major hospitals. The findings indicate that nine per cent of Violence Related Injuries (VRIs) were due to gunshot wounds. Stab wounds and blunt trauma accounted for 31 and 36 per cent of all patients, respectively. The average cost of gunshot wounds was also higher than that of injuries caused by road traffic crashes. The study also found that Jamaican hospitals saw more than 25,000 cases of violence-related injuries (including all mechanisms) in 2014. This cost amounted to JMD 8.6 billion dollars (USD 68.7 million dollars) in total, comprising JMD 3.6 billion dollars (USD 28.8 million dollars) in direct medical costs and JMD 5 billion dollars (USD 40 million dollars) in productivity losses. The medical expenses associated with violence-related injuries accounted for 22 per cent of the hospitals' annual budget (excluding compensation for hospital staff salaries) and two-thirds of the JMD 5.4 billion (USD 43.2 million) budget for goods and services allocated to them by the Ministry of Health. (3) One in 4 surgical operations were cancelled to allow for treatment of VRIs. As Mark Rosenberg said, "The same evidence-based approach that is saving millions of lives from motor-vehicle crashes, as well as from smoking, cancer and HIV/AIDS, can help reduce the toll of deaths and injuries from gun violence...." (4)

The evidence is clear: Violence is Preventable

Sustained and coordinated national and regional responses are urgent. We need to understand both the evidence on what works, as well as what does not work for violence prevention. First, we should not be replicating what has been found not to work (and/or have negative unintended consequences). These include fear-based and punishment-focused approaches like Scared Straight, (5) boot camps, military-style programmes, D.A.R.E (Drug Abuse Resistance Education), (6) Zero Tolerance, (7) curfew laws, mandatory minimum sentences, (8) and large custodial facilities. (9,10). On the other hand, approaches that have been evaluated and found to have positive impact (in the Caribbean or internationally), should be considered and adapted appropriately for local contexts (*Table 2*).

Table 2 - What Works

Life Stages	*Intervention*	*Examples*
Antenatal / Parenting Programmes	• Treat Depression • Parenting Education beginning in Pregnancy	• Health Services • Triple "P" • Parenting for Lifelong Health • Reach UP (*used in Jamaica*)
First 1,000 Days	Home Visiting by Community Health Aides with stimulation	• Reach UP (*used in Jamaica*) • *Roving Care Givers (used in Dominica. St. Vincent and Grenadines)*
Clinic Visits	Parenting Sessions at clinics	• Early Stimulation Clinic Programme (*used in Jamaica*)
Basic School	Teacher / children Intervention	• IRIE Tool Kit (*used in Jamaica*)
Primary school	• Behavioural Interventions Screen • Child and Adolescent Clinics with family therapy and home visits • Academic and social intervention to keep children in schools. • Afterschool programmes w/ Socio-emotional learning content (i.e. Mindfulness)	• Child Behaviour Checklist Ages 6–18, (11) Child Behaviour Rating Scale (CBRS), (12) Strengths and Difficulties Questionnaire (SDQ), (13,14) (Goodman, 1997), Youth Risk Screen (Y-RISC), (15) • *Child and Adolescent Guidance Clinics (used in Jamaica, Barbados, & Trinidad)* • Child Resiliency Programme (*used in Jamaica*) • Sports for All, Uniformed groups (nonmilitary) (16) • Literacy Programmes (i.e. ARROW *used in Jamaica*, *Trinidad*) • Heart Math (*used in Jamaica & Trinidad*), (17)
High School	• Academic and social to keep children in schools. • Preventing Intimate Partner Violence (IVP)	• Afterschool Programmes, (18) • SASA! Activist Kit for Preventing Violence against Women and HIV (19) • Stepping Stones Community mobilization to change social norms, (20)
Hospital Based Interventions	• Multi-agency data driven response uses data from Police and Hospital injuries.	• Cardiff Model, (21,22) • West Kingston Crime Observatory (*used in Jamaica*)
Police	• Focus on geographical high crime areas. • Framework guiding police interactions with citizens. • Focus on Prolific Offenders • Focus on particular underlying factors contributing to violence dynamics in a particular space.	• Hot Spot Policing, (23) • Procedural Justice, (24) • Focused Deterrence (21) • Problem-Oriented Policing (25)
Community Based Interventions	• Outreach workers connect high-risk youth to case managers who link to services	• Safe Successful Youth Initiative (SSYI) (26)

Critical Conditions for Success in Violence prevention programmes

For the above programmes to be successful, they require five key conditions for them to be highly effective and efficient in preventing violence. These conditions include:

- **Design and fidelity in implementation:** this means programmes are informed by theory and evidence, standardized in implementation, and executed according to their design.
- **Targeting and Dosage:** this includes targeting high-risk individuals/communities and providing the right number of services/beneficiaries needed to have impact on violence.
- **Monitoring, Evaluation and Learning (MEL):** interventions are guided by data, they are measured, monitored, evaluated and adjustments are made based on the lessons learned.
- **Financial and technical capacity:** Interventions require sufficient and sustainable financial resources, and carefully selected and trained staff with the right skills.
- **Community engagement:** interventions will only be successful when they are embedded and connected to local communities.

Call to Action

Health-care leaders can be at the forefront of reducing violence across the region by guiding the widescale implementation of evidence-based violence prevention interventions and ensure the provision of the conditions for their success. The region should set a target of a 50% reduction in homicide by 2030 (to a rate of 14.2 per 100,000). This would require a reduction of 223 homicides per year across the region. Each country would need to set national annual targets. For example, St Vincent and Grenadines would need to reduce their homicides by four every year for six years.

This is a practical and achievable goal, which will have tremendous benefits for the health services and society overall.

Dr. Elizabeth Ward, Medical Epidemiologist. Citizen Security and Crime Prevention Expert of the Technical Assistance to the Citizen Security Plan of Jamaica

Ms Heather Sutton "Team Leader of the Technical Assistance to the Citizen Security Plan of Jamaica"

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VIOLENCE IN THE CARIBBEAN: A Public Health Crisis

Programme

DAY 1: Thursday 25th April 2024

Session 1	**OPENING SESSION**
9:00 am	**Opening Remarks** Joy St. John, Executive Director, Caribbean Public Health Agency
9:10 am	**Feature Address** **Title:** Violence in the Caribbean: A Public Health Crisis **Speaker:** The Rt. Honourable Philip J. Pierre, Prime Minister of St. Lucia **Chairperson:** Hon. M. Jn Baptiste, Minister of Health Wellness and Elderly Affairs **Room:** Gros Islet 1
9:45 am	**PANEL DISCUSSION: Aiming for Change: Firearms and Public Health Intersections** **Speakers:** **Chairperson:** Sharon Belmar-George **Room:** Gros Islet 1
9:45 am	**Opening Remarks** Sharon Belmar- George
9:50 am	**Presentation** The Honourable Terrence Drew, Prime Minister of St. Kitts and Nevis
10:00 am	**Video Presentation** Cristophe Eick, Ambassador Federal Republic of Germany
10:10 am	**Pathway to Policy integrating security and public health responses to firearms trafficking and violence in the Caribbean.** Nicolas Florquin, SAS; Joy St. John, Executive Director, CARPHA; Natasha Sobers, GACDRC, UWI
	Moving Forward - Key Policy Recommendations - Tackling Criminality Callixtus Joseph, IMPACS
10:35 am	**Discussion Forum: Q & A** Chairperson & All Presenters

10:50 am	**COFFEE BREAK /POSTERS/ EXHIBITS** Room: Gros Islet 2 & Pre-Function Area
Time	**Session 2: EMERGING RESEARCH THEMES**
	Chairpersons: L. Indar, S. Stewart
	Room: Gros Islet 1
11:30 am	(O-02) **Impact and mental health mediation of intimate partner violence on child behaviour in Trinidad and Tobago** *J Mottley*
11:45 am	(O-03) **Trends in New Psychiatric Diagnoses in Persons During Peri-pandemic Periods at the Georgetown Public Hospital Corporation** *T Griffith*
12:00 noon	(O-04) **A retrospective study of central nervous system infections among patients admitted to the department of Internal Medicine, Georgetown Public Hospital Corporation** *K. Dookram*
12:15 pm	(O-05) **A retrospective study of five-year survival rates of women diagnosed with and treated for cervical cancer between 2012 and 2016 at the Georgetown Public Hospital Corporation** *O Perreira*
12:30 pm	(O-06) **ADHERENT Study: Assessment of Diabetes mellitus pharmacological adherence in primary Healthcare facilities Regarding social Inequalities and Technology use** *E Mandeville*
12:45 pm	(O-08) **Studies on the zoonotic potential of sars-cov-2 from dogs and cats** *V Matthew-Belmar*
1:00 pm	(O-44) **Reproductive health history and late life cognition in Tobagonian women** *C Rosano, R Cvejkus, Al Acevedo-Fontanez, J M Zmuda, V Wheeler, I Miljkovic*
1:15 pm	**LUNCH** Room: Gourmet Marche
2:30 pm	**FEATURE LECTURE 1:** **Title: The Health Services contribution to a 50% reduction in homicides in the Caribbean by 2030** **Speaker: Dr. Elizabeth Ward** **Chairperson:** D. Ramdath **Room:** Gros Islet 1

Time	**Session 3a:** **VIOLENCE: A GROWING PROBLEM** **Chairpersons:** *S. Keizer-Beache, C Radix* **Room:** Gros Islet 1	**Session 3b** **MALARIA CONTROL IN HARD-TO-REACH POPULATIONS** **Chairpersons:** *H. Cox* **Room:** Gros Islet 3
3:15 pm	(O-09) **Patterns of interpersonal violence injury location by weapon type** *J Agard, N Sobers, H Wong, M Joseph, J Toppin, N Florquin, A-S Fabre, R King, G Gordon Strachan, SG Anderson*	**Malaria Elimination and its Challenges** *PAHO/WDC Speaker TBC*
3:30 pm	(O-10) **Attitudes of women towards justifying domestic violence in Guyana: a national survey.** *G Joseph, LP Vidaletti, C Branas, CN. Morrison*	**Keynote Lecture – Management of Malaria Resurgence in Greece** *S Mourelatos*

Time	Session 3a: VIOLENCE: A GROWING PROBLEM **Chairpersons:** *S. Keizer-Beache, C Radix* **Room:** Gros Islet 1	Session 3b MALARIA CONTROL IN HARD-TO-REACH POPULATIONS **Chairpersons:** *H. Cox* **Room:** Gros Islet 3
3:45 pm	(O-11) **Masculinities, men's health, and interpersonal violence in the Caribbean** *S. Caffe, C. Hommes, E. Vega*	**Preventing Malaria Resurgence - a Country perspective** *CARPHA Member State, TBC*
4:00 pm	(O-12) **Adverse Childhood Experiences among English-Speaking Caribbean Adults Raised Without Corporal Punishment in the Home** *L Mohammed, ED Thomas, J Noel, T Murray, R Isaac, C Belmar-Roberts, R Evans, R Waechter, B Landon*	**Implementing innovative vector control solutions** *S. Hills*
4:15 pm	**COFFEE BREAK /POSTERS/ EXHIBITS** **Room:** Gros Islet 2 & Pre-Function Area	

Time	Session 4a: VIOLENCE: A REGIONAL PROBLEM **Chairpersons:** *P. McMillan, C. Radix* **Room:** Gros Islet 1	Session 4b MALARIA CONTROL IN HARD-TO-REACH POPULATIONS **Chairpersons:** *H. Cox* **Room:** Gros Islet 3
4:30 pm	(O-13) **A hungry youth is an angry youth: The exploration of food insecurity and school-based violence among Caribbean youth.** *J Alexander-Bady, T Sufyani, J Nayeem, A Allen*	**Implementing Innovative Surveillance Solutions** *P Martinez de Salazar*
4:45 pm	(O-14) **Examining the context within which interpersonal violence injuries occur in the three country sites - The Bahamas, Barbados, and Jamaica** *K Norville J Agard, N Sobers, H Wong, M Joseph, J Toppin, N Florquin, A-S Fabre, R King, G Gordon-Strachan, SG Anderson*	**Implementing Innovative Case Management Solutions** *Speakers from: Suriname National Malaria Programme, Centre d'Investigation Clinique, French Guiana*
5:00 pm	(O-15) **The Lived Experience of Women in Intimate Partner Violence (IPV) Relationships in Rural Communities in Trinidad** *LV Babb, A Cumberbatch-Alleyne, ON Ocho*	**Panel discussion - challenges in delivering malaria interventions in hard-to-reach populations.** *F Fouque, Scientist and Focal person for Vector, TDR/WHO and PAHO speaker TBC*
5:15 pm	(O-16) **Self-reported experience of sexual, physical, and verbal violence among university students in Barbados during the COVID-19 pandemic** *MH Campbell, T Whitby-Best, NS Greaves, MK Emmanuel, PS Chami, SG Anderson*	**Plenary**
5:30 pm	**End of Session**	
6:00 pm	**Opening Ceremony** Harbor Club	

DAY 2: Friday 26th April 2024

9:00 am **FEATURE LECTURE 2:**
Title: Gun Violence in the Caribbean: A focus on guns and bullets
Speaker: Prof. Hargarten (Virtual)
Chairperson: *J. St. John*
Room: Gros Islet 1

Time	Session 5a: **VIOLENCE: QUALITY OF LIFE AND POLICIES** **Chairpersons:** *E. Ward, N. Sobers* **Room:** Gros Islet 1	Session 5b **POSTER SESSION 1** **Chairperson:** *M. Reid, T. Jagnarine* **Room:** Gros Islet 3
9:45 am	(O-17) **Quality of Life Among English-speaking Caribbean Adults Raised Without Corporal Punishment–Comparing Quantitative and Qualitative Assessments** *J Noel, ED. Thomas, L Mohammed, T Murray, R Isaac, R Waechter, B Landon*	(P-10) **Securing Health Information: A Study of Patient Privacy in Guyana's HIV Care and Treatment Facilities** *T Jagnarine* (P-11) **Microbial Analysis of Indoor Air Quality and the Effectiveness of a Disinfection Intervention at a University Library** *B Ally-Charles, E Tyrell, K Hohenkirk, A Hutson, O Van-Lewin* (P-12) **Primary care physicians' perceptions of Pre- exposure prophylaxis (PrEP) for HIV in Guyana: a qualitative study** *A Wilson-Parkinson, R Kurup, B Wilson, T Jagnarine*
10:00 am	(O-18) **Perceived Safety in U.S. Virgin Islands' Public Secondary Schools: Implications for Student Learning and Overall Student Health** *N Michael, D Howell, A Williams, T Rabsatt*	(P-13) **Early detection and response: The importance of rapid syndromic diagnostics in the control of communicable disease in UK Caribbean territories** *M Dryden, J Lee, N Wright, M St Hill, T Skerritt, A Siebs, C Blake, A Andrewin* (P-14) **Bloodstream patients among patients admitted to the department of internal medicine, Georgetown Public Hospital Corporation** *A Edun, D Persaud* (P-15) **Evaluation of management in women with ASC-US smear and High-risk HPV positive test in Martinique** *F Najioullah, A Monthieux, M Dramé, M Jean-Laurent*

Time	Session 5a: **VIOLENCE: QUALITY OF LIFE AND POLICIES** **Chairpersons:** *E. Ward, N. Sobers* **Room:** Gros Islet 1	Session 5b **POSTER SESSION 1** **Chairperson:** *M. Reid, T. Jagnarine* **Room:** Gros Islet 3
10:15 am	(O-19) **The Youth Resilience, Inclusion, and Empowerment Program: Using the Public Health Approach for the Prevention of Crime and Violence in the Eastern Caribbean** *C Bailey, K Casey, H Cheon, C Katz*	(P-16) **Factors Influencing Non-Compliance of Anti-Retroviral Treatment in Patients with HIV at the National Care and Treatment Centre** *A Davilar, T Hyman, J Glasgow, T Hunte, N Holder, R Kurup* (P-17) **The Impact of Covid-19 on Imaging Case Volumes at Georgetown Public Hospital Corporation, Radiology Department, Guyana** *S Sagon, S Baskh, J Persaud, M Dainty, D Mangroo* (P-18) **The impact of Coronavirus Disease 2019 on staff at a tertiary referral hospital in Guyana** *P Findlay-Hardyal, A Harvey, A Prakash, J Francke, T Grogan, R Sanghvi*
10:30 am	(O-20) **The development of Trinidad and Tobago's first National Clinical and Policy Guidelines on Intimate Partner Violence and Sexual Violence** *N Lyons, B Baer, N Sookhoo, A Sirjusingh, R Bridgelal-Nagassar, M Harris, CF Allen*	(P-19) **Knowledge, Acceptance and attitudes of parents regarding COVID-19 vaccination of children at the Georgetown Public Hospital Corporation and its Satellite Health Centers** *B Deokarran-Benn, L Hinds, M Persaud* (P-20) **The Clinical Course of Covid 19 in the Paediatric Population at Georgetown Public Hospital and Infectious Disease Hospital: A Retrospective Chart Review** *K Bynoe, P Persaud* (P21) **Trends in Transfusion-Transmissible Infections Among Blood Donors between 2018-2022 at the National Blood Transfusion Service, Guyana** *J Hatton, K Hohenkirk, C Abrams, A Hutson, O Vanlewin, P Lewis, L Pryce, E. Tyrell, B Ally-Charles, N Sitchan, M Persaud, D David*

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10:45 am	(O-21) **Feasibility and readiness assessment of small island developing states for development and strengthening of primary care registries.** *N Sobers, J Agard, J Campbell, S Jeyaseelan*	(P-38) **The Incidence of Lower Limb Amputations in Type Two Diabetic Patients at the Georgetown Public Hospital Corporation** *K Cummings, J Bartholomew, C Correia, W Emptage, C Miggins-Barclay* (P-22) **Mental Health Assessment of Key Populations Living with HIV (PLHIV) in Guyana** *T Jagnarine, A Totaram* (P-23) **The Effects of Fluoxetine on Anxiety-Like Behaviours of Zebrafish (Danio-rerio)** *J Ramcharitar, R Lue Chin, J Atteih, D Balladin, S Richardson, A Mohammed, A Ramcharitar, R Lue Chin, J Atteih, D Balladin, S Richardson, A Mohammed, A Persad, D Kumarsingh, JM Wood-Saloman*
11:00 am	(O-22) **Garbage Codes as Underlying Causes of Out-of-Hospital Deaths in East Trinidad, 2022–2023** *A Bridgelal-Gonzales, V Gajadhar*	(P-29) **Workplace stress conditions and its impact on the health care delivery at the New Amsterdam Hospital during the covid-19 pandemic between April-December 2020: A retrospective study of Health Care Workers** *T Ross, C Edwards, A Fortune A Sinclair, S Hinkson* (P-30) **Characterization of Suicidal behaviour among patients 10 to 17 years old who attended the Georgetown Public Hospital Corporation Psychiatry clinic from 1st January 2022 to 31st December 2022** *S Toney, J October* (P-31) **Caregiver Burden in Mental Illness** *K Munroe, B DeClou*
11:15 am	**COFFEE BREAK/POSTER/EXHIBITS** **Room:** Gros Islet 2 and Pre-Function Area	

Time	CONCURRENT SESSIONS **Session 6a:** **NON-COMMUNICABLE DISEASES** **Chairpersons:** *R. Georges, D. Cohall* **Room:** Gros Islet 1	CONCURRENT SESSIONS **Session 6b:** **INFECTIOUS DISEASES** **Chairpersons:** *M. Thame, S. Bidaisee* **Room:** Gros Islet 3
11:45 am	(O-23) **Physical Activity, Sedentary Behaviour and Muscle Health: The Tobago Health Study** *I Miljkovic, R Cvejkus, A Acevedo-Fontanez, C Rosano, V Wheeler*	(O-30) **A Research Agenda to Support Evidence Generation and to Inform Policy Decisions on Vector-borne Diseases in the Caribbean** *W Dunbar, J Indarsingh, R Ragoo, H Cox*
12:00 noon	(O-24) **Enablers, challenges, and benefits of multilevel intersectoral collaboration for NCD Prevention: The Kalinago in Dominica** *R Emmanuel, UM. Read, JK Cruickshank, S Harding*	(O-31) **The impact of the coronavirus disease 2019 pandemic on stroke hospitalizations in the Academic Hospital of Paramaribo with data from 2018 to 2021: are there reasons for concern?** *A Mahabier, A Jarbandhan*
12:15 pm	(O-25) **Assessing the effectiveness of a gym-based childhood obesity management program.** *E Runfeldt, MA St. John, A. Warner, C. Bowen, N Sobers*	(O-32) **Severe Dengue Cases with Multi-visceral Failure Admitted to an Intensive Care Unit: A Prospective Study in Martinique** *D Resiere, J Florentin, M Drame, R Banydeen , R Neviere*
12:30 pm	(O-26) **An Assessment of the Knowledge, Attitudes and Practices Regarding Ultra-Processed Foods among Residents of Trinidad and Tobago: A Social Media Study** *D Makoonsingh, M Webb, S Beckford*	(O-33) **The Public Health importance of Detecting Enveloped and Non-Enveloped Viruses in Wastewater** *K Farmer-Diaz, M Matthew-Bernard, S Cheetham, K Mitchell, C Macpherson, ME Ramos-Nino*
12:45 pm	(O-27) **Primary Care Physicians' Practices and Barriers in Evaluating and Managing Chronic Kidney Disease in New Providence, The Bahamas** *W Bain, S Pinder-Butler, T Fountain, I Grant*	(O-34) **An Assessment of Sputum Cultures in Patients at the Infectious Disease Hospital in Guyana during the COVID-19 Era** *E Tyrell, A Lewis, E Rampersaud, Z Baird, B Ally-Charles, A Pearson, A Hutson, C Abrams, B Chester*
1:00 pm	(O-28) **Cancer burden in Tobago, West Indies** *D George, L Paul, H Daisley*	(O-35) **Complementary and Alternative Medicine Views and Practices for the treatment of Covid-19. A Cross Sectional Analysis in Eastern Trinidad, 2022** *SD Thompson, A Bridgelal*
1:15 pm	(O-29) **The trend of stroke hospitalizations in the Academic Hospital of Paramaribo by sociodemographic and geographical differences from 2018 to 2021: a retrospective study** *A Mahabier, A Jarbandhan*	(O-36) **Phytochemical screening and Antimicrobial potential of Psidium guajava (Guava) leaf extract** *B Ally-Charles, E Tyrell, R Khatun, R Lall, B Yassin, M King, D Rajnarine, B Dey, A Hutson*
1:30 pm	**NETWORKING LUNCH / LECTURE** **Room:** Gourmet Marche	

Time	Session 7a: **Poster Session 2** **Chairpersons:** *M. Reid/ C. MacPherson* **Room:** Gros Islet 1	**Session 7b:** **Research Skills Workshop** **Chairpersons:** *D. Ramdath, S. Stewart* **Room:** Gros Islet 3
2:30 pm	(P-32) **Knowledge, Attitude, and Practices Towards Chronic Kidney Disease Among Healthcare Professionals in Trinidad and Tobago** *V Singh, K St Brice, S Seepersad, S Pakeerah, G Bardouille, H Thompson, T Hassim, K Martin, J Ragoonanan* (P-33) **A Comparative Study on Conventional Screening Methods and Citrate Haemoglobin Electrophoresis on Sickle Cell Patients in Guyana** *A Anderson, R Kurup* (P-34) **Haemodialysis Vs. Peritoneal Dialysis: A Quality-Of-Life Assessment Study in Guyana** *G Bryan, H Chester, S Connell, S Griffith, K Montague, R Sanmoogan, N Vieira, J Hatton*	Assistance with: • Preparing a research proposal • Study designs. • Writing an abstract ★ Meet a Professor
2:45 pm	(P-36) **The knowledge, perception, and practice of women towards cervical cancer screening who attended the Obstetrics and Gynaecology clinic of the New Amsterdam Regional Hospital over a three-months period.** *M Reddi, M Perreira, B King, S Singh* (P-37) **Making progress on NCDs by tackling mental health stigma in small island communities - the British Virgin Islands and Bermuda** *V Rubaine, A Neilson-Williams, K Grant-Simmons, S Baker, K Crawshaw* (P-39) **In-person vs online delivery of a nutrition education intervention for improving nutrition knowledge and attitudes of amateur adolescent basketballers in eastern Trinidad.** *CJ Samuel, M Webb, S Beckford*	
3:00 pm	(P-41) **Guyana's Approach to Evidence-Based Public Health Practices at the Ministry of Health** *T Jagnarine* (P-42) **Overcoming Barriers to Health Tourism Development in Guyana: A Comprehensive Study** *M Sooklall, T Jagnarine* (P-43) **Analysis of Animal Research Regulations within Developing Caribbean Countries** *S Francis-Charles, S Bidaisee*	

Time	Session 7a: **Poster Session 2** **Chairpersons:** *M. Reid/ C. MacPherson* **Room:** Gros Islet 1	**Session 7b:** **Research Skills Workshop** **Chairpersons:** *D. Ramdath, S. Stewart* **Room:** Gros Islet 3
3:15pm	(P-45) **Adverse Reaction among blood donors in Guyana** *D Simpson, S Ross, P Lewis, EF Allo, R Escalada* (P-46) **Barriers and Opportunities to Climate Change Health System Strengthening in the Eastern Caribbean** *Greaves, W Gabriel, L Charles, A Thomas, K Polson, L Telesford* (P-47) **Distribution of ABO and Rh (D) blood group antigens among blood donors in Guyana** *R Kurup, P Lewis, A Joseph, L Ward, A Anderson, M McKenzie, C Boston, R Gordon*	
3:30 pm	(P-49) **Perceptions of Registered Nurses at the public hospital and selected health centres regarding the mandatory continuous nursing education** *A Jones, N Dass-Sutton, S Amin, N Holder,* R Kurup (P-50) **Development of Scientific and Clinical research Cooperation in the Caribbean: A new bibliometric Internet platform (DOSCCAR)** *C Contaret, J Deloumeaux, A Puello, V Pollanco, AP Ortiz, O Edwige, M Dramé* (P-51) **A Cross-sectional Study of the Training Status and of the Knowledge, Attitudes, and Practices of Food Handlers in Temporary Restaurants in Barbados** *D Straker, H Harewood*	
3:45 pm	(P-53) **Knowledge, Attitudes and Practices (KAP) of Female Students of the University of Guyana Regarding Pap Smears** *N Williams, V Boodram, J Gobin, D Mahabir, L Singh, R Tewari, J Hatton, N Sitchao* (P-54) **Job Satisfaction Among Physicians at a Tertiary Care Institution in Georgetown Guyana** *D Van-Veen B McDavid, B Ally-Charles A Hutson, O Vanlewin, C Abrams J. Hatton* (P-55) **Environmental factors that contribute to falling among the elderly population in two geriatric homes in Guyana.** *C Andrews, Warde, F Hamilton, S Henry S Marks S Hunter S Johnson, S Villarreal, E Cummings*	

Time	Session 7a: **Poster Session 2** **Chairpersons:** *M. Reid/ C. MacPherson* **Room:** Gros Islet 1	Session 7b: **Research Skills Workshop** **Chairpersons:** *D. Ramdath, S. Stewart* **Room:** Gros Islet 3
4:00 pm	(P-24) **Factors associated with readmission to the Psychiatric Holding at Georgetown Public Hospital Corporation** *E Williams, E Nickram- Validum* (P-25) **Factors associated to depression among adult patients attending to Psychiatric outpatient clinic at Georgetown Public Hospital Corporation during December 2021 to December 2022** *I Duran Llanes, Z Lopez Mompel* (P-26) **Mothering as a Social Determinant of Mental Health: Cultural Dynamics and Insights from Professional Black West Indian Women in the British Virgin Islands** *S. Blount*	
4:15 pm	(P-27) **Exploring the Relationship between Sex, Sleep Patterns, and Psychological Distress among College of Medical Science Students at the University of Guyana** *O Vanlewin, A Hutson, A Abraham, C Abrams, B Ally-Charles, E Tyrell, S Hutson, D Mckenzie, TBraithwaite, D Van Veen, L Harris, D Dass J Hatton, N Paul* (P-28) **Sociodemographic Descriptive Analysis and Navigating the Nexus: Mental Health among College of Medical Sciences Students at the University of Guyana** *A. Hutson, O. Vanlewin, A Abraham, C Abrams B Ally-Charles, E Tyrell, S Hutson, D Mckenzie, T Braithwaite, D Van Veen, L Harris, D Dass J Hatton, N Paul* (P-35) **A Quantitative Retrospective Audit of the Clinical Spectrum and Prevalence of Paediatric Renal Diseases seen within the Paediatric Nephrology Department at Georgetown Public Hospital Corporation (GPHC) during the time period of January,2014 to April,2023** *J Joseph, N Narine, G Ramkumar, B Williams, M Persaud, E Cunjie*	

Time	Session 7a: Poster Session 2 **Chairpersons:** *M. Reid/ C. MacPherson* **Room:** Gros Islet 1	Session 7b: Research Skills Workshop **Chairpersons:** *D. Ramdath, S. Stewart* **Room:** Gros Islet 3
4:30 pm	(P-01) **The Saving Brains Grenada/Conscious Discipline Programme: A Pre-primary and Primary School-Based Violence Prevention Program for Children and Adults** *B. Landon, R. Evans, C. Belmar-Roberts, S. Holmes, R. Isaac, L. Mohammed, T. Murray, J. Noel, E. Thomas, R. Waechter* (P-52) **Basic Life Support: Knowledge, Attitude and Practices of Healthcare Personnel at Selected Institutions in Region 4** *T. Ross, Z. Wilburg, R. Watts* (P-40) **24-Hour Dietary Recall Nutrition Survey in St. Kitts and Nevis** *L Duncan, HC Chen, H Laws*	
4:45 pm	**End of Sessions**	
6:30 pm	**Awards Banquet** **Venue:** Harbor Club (Poolside & Ballroom)	

DAY 3: Saturday 27th April 2024

9:00 am	**FEATURE LECTURE 3** **TTITLE: Reflecting on Criminal Gang Findings and the Prospect for Change** **Speaker:** Mr. T. Weekes **Chairperson:** S. Stewart **Room:** Gros Islet 1

Time	Session 8a PUBLIC HEALTH **Chairpersons:** *H. Cox, S Harding* **Room:** Gros Islet 1	Session 8b Poster Session 3 **Chairpersons:** *M Reid, C. Contaret* **Room:** Gros Islet 3
9:45 am	(O-37) **Can we use wastewater surveillance to detect patterns of antibiotic resistant in bacteria?** *M Matthew-Bernard, K Farmer- Diaz, S Cheetham, K Mitchell, CNL Macpherson, ME Ramos-Nino*	(P-44) **Knowledge, perception, and behaviour of hand hygiene among clinical year medical students at Greenheart Medical University (GMU) and Rajiv Gandhi University of Science and Technology (RGUST) in Guyana** *M Gill, T Jagnarine* (P-48) **The Effectiveness of Self-Care Intervention Model on Quality of Life of Burn Patients admitted to the Burn Care Unit GPHC, Guyana** *A Edwards, A Marks, N Marshall, L Stephanas* (P-02) **Birth Rates in East Trinidad during the Covid-19 Pandemic** *A Bridgelal-Gonzales, S Mahabir, D Geelalsingh*

Time	Session 8a **PUBLIC HEALTH** **Chairpersons:** *H. Cox, S Harding* **Room:** Gros Islet 1	Session 8b **Poster Session 3** **Chairpersons:** *M Reid, C. Contaret* **Room:** Gros Islet 3
10:00 am	(O-38) **A knowledge, attitudes, and practices (KAP) survey amongst veterinarians in Barbados on antibiotic usage, resistance, and antimicrobial stewardship (AMS)** *M Gittens-St.Hilaire, D Elcock, P Chami*	P-03) **Maternal and Perinatal Outcomes associated with Elective Induction of Labor at Full term versus Late Term Pregnancies at Georgetown Public Hospital Corporation from January 2019 to January 2022** *A Matadeen, A Biala, R Sookraj* (P-04) **An Evaluation of the Lipid Profile and Haematology Profile in Down Syndrome Children & Adolescents in Guyana- a pilot study** *M McKenzie, R Kurup, R Manbodh, S Parma, N Rajak, D McKenzie, R Roberts-Martin* (P-05) **Satisfaction of caregivers with the services provided at the Paediatrics Outpatient Department at the Georgetown Public Hospital Cooperation** *M Persaud, K Prashad, N Samaroo, O Harris, K Henry*
10:15 am	(O-39) **Sargassum Invasions and Their Impact on Caribbean Shorelines: Exploring Environmental Violence and Potential Effects on the Human Neurological System** *R Banydeen, J Florentin, C Boullanger, R Neviere, D Resiere*	(P-06) **Respectful Maternity Care (RMC) Formative Assessment – A Case Study of Trinidad and Tobago.** *A James-Euin, W Arneaud, M Rollock, D Lewis, S Curtis, S Stalls, P Sripad, S Moffson, J Ricca, ON Ocho*
10:30 am	(O-40) **Determinants of Long-term Mortality in Barbados** *H Scheck; N Sobers; C Howitt; H Vatanaparast; SG Anderson*	(P-07) **The Impact of the Covid-19 Pandemic on Child Growth in Guyana** *A Phoenix, A Somrah, O Smith, A Jones, J Joseph, H Victorine, J Hatton, M Persaud* (P-08) **A Scoping Review of the Prevalence and Associated Factors of Early Discontinuation Rate of Contraceptive Implants** *C Abrams, J Hatton, K Hohenkirk, A Hutson, E Tyrell, B Ally-Charles, B Chester, O Vanlewin* (P-09) **Sexual Practices, Hygiene and Associated Risk Factors for Urinary Tract Infections among Pregnant Women at the Linden Hospital Complex, Guyana** *C Abrams, K Hohenkirk, J Hatton, A. Hutson, E Tyrell, B Ally-Charles, D Van-Veen, O Vanlewin, B Chester*

Time	Session 8a **PUBLIC HEALTH** **Chairpersons:** *H. Cox, S Harding* **Room:** Gros Islet 1	Session 8b **Poster Session 3** **Chairpersons:** *M Reid, C. Contaret* **Room:** Gros Islet 3
10:45 am	(O-41) **Substance use among men who have sex with men in Region 4 Guyana and its effects on risky sexual behaviour.** *N Tamayo-Jimenez, D Sharma*	
11:00 am	(O-42) **Evaluation of risky sexual behaviour and associated factors among university students in Guyana: a cross-sectional study** *N Harris, T Jagnarine*	
11:15 am	**COFFEE BREAK/POSTERS/ EXHIBITS** **Room:** Gros Islet 2 & Pre-Function Area	

Time	Session 9 **MENTAL HEALTH** **Chairpersons:** G. Hutchinson, M. Campbell **Room:** Gros Islet 1
11:35 am	(O-43) **Implementation of a Multisectoral Programme to Improve Indigenous Adolescent Mental Health in Brazil and Dominica (IMPACT)** *S Harding, S Anderson, L Vargas Dias, D Parmar, P Dazzan, J Murdoch, P Jardim, A Grande, R Gibson, A Abdulkadri, V Iribarrem A Miranda Emmanuel, X Zounrtos*
11:50 am	(O-45) **Hanging Suicides in Martinique** *D Resiere, J Florentin, R Banydeen, R Neviere*
12:05 pm	(O-48) **Completed and attempted suicides, and methods used among adolescents in Trinidad and Tobago from 2013–2022** *K Khan,J Francis, W Furlonge, R Gangoo, E Ganpat, J George, S George, T George, I Gonzalez Ibrahim*
12:20 pm	(O-47) **Addressing the Determinants of Stress among adolescent students through pet ownership** *S. Bidaisee*
12:35 pm	Closing Remarks
7:00 pm	**Closing Ceremony** **Venue:** Bambozee

68th Annual CARPHA Health Research Conference 2024
Poster Presentations

Violence

(P-01) ***The Saving Brains Grenada/Conscious Discipline Programme: A Pre-primary and Primary School-Based Violence Prevention Program for Children and Adults***
B Landon, R Evans, C Belmar-Roberts, S Holmes, R Isaac, L Mohammed, T Murray, J Noel, E Thomas, R Waechter

Family Health

(P-02) ***Birth Rates in East Trinidad during the Covid-19 Pandemic***
A Bridgelal-Gonzales, S Mahabir, D Geelalsingh

(P-03) ***Maternal and Perinatal Outcomes associated with Elective Induction of Labor at Full term versus Late Term Pregnancies at Georgetown Public Hospital Corporation from January 2019 to January 2022***
A Matadeen, A Biala, R Sookraj

(P-04) ***An Evaluation of the Lipid Profile and Haematology Profile in Down Syndrome Children & Adolescents in Guyana- a pilot study***
M McKenzie, R Kurup, R Manbodh, S Parma, N Rajak, D McKenzie, R Roberts-Martin

(P-05) ***Satisfaction of caregivers with the services provided at the Paediatrics Outpatient Department at the Georgetown Public Hospital Cooperation***
M Persaud, K Prashad, N Samaroo, O Harris, K Henry

(P-06) ***Respectful Maternity Care (RMC) Formative Assessment – A Case Study of Trinidad and Tobago***
A James-Euin, W Arneaud, M Rollock, D Lewis, S Curtis, S Stalls, P Sripad, S Moffson, J Ricca, ON Ocho

(P-07) ***The Impact of the Covid-19 Pandemic on Child Growth in Guyana***
A Phoenix, A Somrah, O Smith, A Jones, J Joseph, H Victorine, J Hatton, M Persaud

(P-08) ***A Scoping Review of the Prevalence and Associated Factors of Early Discontinuation Rate of Contraceptive Implants***
C Abrams, J Hatton, K Hohenkirk, A Hutson, E Tyrell, B Ally-Charles, B Chester, O Vanlewin

(P-09) ***Sexual Practices, Hygiene and Associated Risk Factors for Urinary Tract Infections among Pregnant Women at the Linden Hospital Complex, Guyana***
C Abrams, K Hohenkirk, J Hatton, A. Hutson, E Tyrell, B Ally-Charles, D Van-Veen, O Vanlewin, B Chester

Infectious Disease

(P-10) ***Securing Health Information: A Study of Patient Privacy in Guyana's HIV Care and Treatment Facilities***
T. Jagnarine

(P-11) ***Microbial Analysis of Indoor Air Quality and the Effectiveness of a Disinfection Intervention at a University Library***
B Ally-Charles, E Tyrell, K Hohenkirk, A Hutson, O Van-Lewin

(P-12) ***Primary care physicians' perceptions of Pre- exposure prophylaxis (PrEP) for HIV in Guyana: a qualitative study***
A. Wilson-Parkinson, R. Kurup, B. Wilson, T. Jagnarine

(P-13) ***Early detection and response: The importance of rapid syndromic diagnostics in the control of communicable disease in UK Caribbean territories***
M Dryden, J Lee, N Wright, M St Hill, T Skerritt, A Siebs, C Blake, A Andrewin

(P-14) ***Bloodstream patients among patients admitted to the department of internal medicine, Georgetown Public Hospital Corporation***
A Edun, D Persaud

(P-15) ***Evaluation of management in women with ASC-US smear and High-risk HPV positive test in Martinique***
F Najioullah, A Monthieux, M Dramé, M Jean-Laurent

(P-16) ***Factors Influencing Non-Compliance of Anti-Retroviral Treatment in Patients with HIV at the National Care and Treatment Centre***
A Davilar, T Hyman, J Glasgow, T Hunte, N Holder, R Kurup

(P-17) ***The Impact of Covid-19 on Imaging Case Volumes at Georgetown Public Hospital Corporation, Radiology Department, Guyana***
S Sagon, S Baskh, J Persaud, M Dainty, D Mangroo

(P-18) ***The impact of Coronavirus Disease 2019 on staff at a tertiary referral hospital in Guyana***
P Findlay-Hardyal, A Harvey, A Prakash, J Francke, T Grogan, R Sanghvi

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J Hatton, K Hohenkirk, C Abrams, A Hutson, O Vanlewin, P Lewis, L Pryce, E. Tyrell, B Ally-Charles, N Sitchan, M Persaud, D David

Mental Health

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T Jagnarine, A Totaram

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(P-24) ***Factors associated with readmission to the Psychiatric Holding at Georgetown Public Hospital Corporation***
E Williams, E Nickram- Validum

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O Vanlewin, A Hutson, A Abraham, C Abrams, B Ally-Charles, E Tyrell, S Hutson, D Mckenzie, T Braithwaite, D Van Veen, L Harris, D Dass J Hatton, N Paul

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(P-29) ***Workplace stress conditions and its impact on the Health care delivery at the New Amsterdam Hospital during the covid-19 pandemic between April-December 2020: A retrospective study of Health Care Workers***
T Ross, C Edwards, A Fortune A Sinclair, S Hinkson

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S Toney, J October

(P-31) ***Caregiver Burden in Mental Illness***
K Munroe, B DeClou

Non Communicable Diseases

(P-32) ***Knowledge, Attitude, and Practices Towards Chronic Kidney Disease Among Healthcare Professionals in Trinidad and Tobago***
V Singh, K St Brice, S Seepersad, S Pakeerah, G Bardouille, H Thompson, T Hassim, K Martin, J Ragoonanan

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G Bryan, H Chester, S Connell, S Griffith, K Montague, R Sanmoogan, N Vieira, J Hatton

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J Joseph, N Narine, G Ramkumar, B Williams, M Persaud, E Cunjie

(P-36) ***The knowledge, perception, and practice of women towards cervical cancer screening who attended the Obstetrics and Gynaecology clinic of the New Amsterdam Regional Hospital over a three-months period.***
M Reddi, M Perreira, B King, S Singh

(P-37) ***Making progress on NCDs by tackling mental health stigma in small island communities - the British Virgin Islands and Bermuda***
V Rubaine, A Neilson-Williams, K Grant-Simmons, S Baker, K Crawshaw

(P-38) ***The Incidence of Lower Limb Amputations in Type Two Diabetic Patients at the Georgetown Public Hospital Corporation***
K Cummings, J Bartholomew, C Correia, W Emptage, C Miggins-Barclay

Nutrition

(P-39) ***In-person vs online delivery of a nutrition education intervention for improving nutrition knowledge and attitudes of amateur adolescent basketballers in eastern Trinidad.***
CJ Samuel, M Webb, S Beckford

(P-40) ***24-Hour Dietary Recall Nutrition Survey in St. Kitts and Nevis***
L Duncan, HC Chen, H Laws

Public Health

(P-41) ***Guyana's Approach to Evidence-Based Public Health Practices at the Ministry of Health***
T Jagnarine

(P-42) ***Overcoming Barriers to Health Tourism Development in Guyana: A Comprehensive Study***
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(P-43) ***Analysis of Animal Research Regulations within Developing Caribbean Countries***
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(P-44) ***Knowledge, perception, and behaviour of hand hygiene among clinical year medical students at Greenheart Medical University (GMU) and Rajiv Gandhi University of Science and Technology (RGUST) in Guyana***
M Gill, T Jagnarine

(P-45) ***Adverse Reaction among blood donors in Guyana***
D Simpson, S Ross, P Lewis, E Forlack Allo, R Escalada

(P-46) ***Barriers and Opportunities to Climate Change Health System Strengthening in the Eastern Caribbean***
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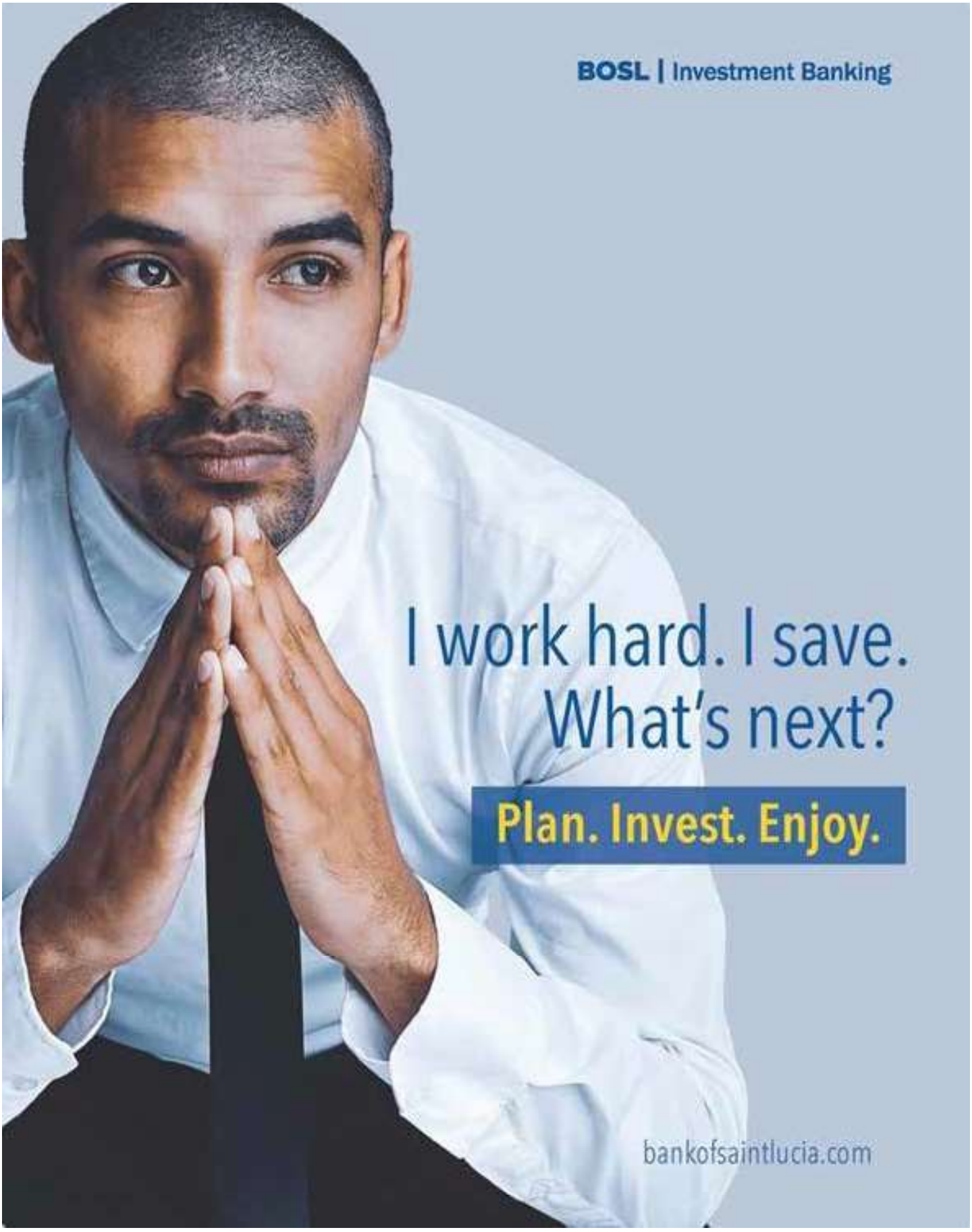
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O-02

Impact and mental health mediation of intimate partner violence on child behaviour in Trinidad and Tobago

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Objective: Intimate partner violence (IPV) is known to have detrimental effects on persons directly experiencing this form of abuse, and on their children. Emerging research also indicates that a parent's experience of IPV may operate through various intermediary pathways to influence children's well-being. However, there is still no established model to explain these underlying mechanisms. This study is one of few assessing the extent to which maternal mental health symptoms mediate the association between maternal exposure to IPV and child behavioural problems.
Methods: Using data from a 2017 population-based, cross-sectional survey, we performed logistic regression to assess the impact of lifetime maternal IPV exposure on child behavioural problems (withdrawal or aggression). We used generalized structural equation modelling to test the mediation effect of both maternal depression and anxiety symptoms on the association between maternal IPV exposure and child behavioural problems.
Results: Over half (55%; 95% CI, 48.3-60.8) of mothers had ever experienced IPV and 12.5% (95% CI, 8.0-19.1) of children in the sample displayed behavioural problems as reported by their mothers. Mothers who ever experienced IPV were almost three times as likely to report their children displaying behavioural problems compared to mothers who had never experienced IPV (OR=2.81; 95% CI, 1.08-7.33). Additionally, we found that both maternal depressive symptoms and maternal anxiety symptoms partially mediated the relationship between maternal exposure to IPV and child behavioural problems.
Conclusion: Our results suggest that the effect of maternal IPV exposure on child behavioural problems is mediated by maternal depression and anxiety symptoms. These findings can be used to design future, longitudinal studies on the effects of IPV and can help to inform interventions aimed at improving both parent and child well-being in the Caribbean, where IPV is highly prevalent and where no similar analysis has been performed to date.

O-03

Trends in New Psychiatric Diagnoses in Persons During Peri-pandemic Periods at the Georgetown Public Hospital Corporation.

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Objective: To undertake a descriptive survey of individuals with newly diagnosed psychiatric disorders at the GPHC Psychiatry Outpatient Clinic during the peri-pandemic period 2019-2021.
Methods: This retrospective observational study was conducted assessing the period March 11th, 2020, to May 6th, 2020, with controls from the same period in 2019 and 2021. A total of 224 charts were reviewed. Variables extracted included patient demographics and psychiatric diagnoses.
Results: The average number of patients in 2020 (M=5.6, SD=2.9) was lower compared to both 2019 (M=11.9, SD=4.4) and 2021 (M=10.5, SD=3.4), with mean differences of -6.25 (p=0.007, 95% CI[-10.955,-1.545]) and -4.875 (p=0.041, 95% CI[9.580,-0.170]) respectively. Substance Related and Addictive Disorders (26.3%, 33.3%, 28.6%), Schizophrenia Spectrum and other Psychotic Disorders (22.1%, 28.9%, 11.9%) and Depressive Disorders (23.2%, 8.9%, 15.5%) represented the most prevalent new psychiatric diagnoses given to patients in 2019,2020,2021 respectively (p=0.021). In 2020 more men 73.3%) were given new psychiatric diagnoses than in 2019 (55.8%) and 2021 (46.4%) (p=0.013).
Conclusion: During the initial stages of the pandemic new psychiatric presentations decreased when compared to similar periods in 2019 and 2021 likely due to the lockdown measures imposed by Governments, the infection and death rates, hospital limitations to 'emergency cases' only and fear of contamination.

O-04

A retrospective study of central nervous system infections among patients admitted to the department of Internal Medicine, Georgetown Public Hospital Corporation

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Objective: To determine the incidence and distribution of CNS infections among patients admitted to the internal medicine department, GPHC along with the demographic characteristics, comorbidities, presenting signs and symptoms, diagnostic criteria used and outcomes in these cases.
Methods: A retrospective descriptive analysis was conducted on patient chart and microbiologic data extracted for 71 patients admitted over a two-year period. Incidence was calculated and the IBM SPSS analytical software was utilized for data analysis and identifying statistically significant relationships.
Results: The incidence of CNS infections was 0.673% (673/100,000) with bacterial/viral meningitis being the most common. Male to female ratio was more than 2:1 and Afro-Guyanese accounted for the majority of cases. HIV Infection was the most common comorbidity and altered mental status was the most common presentation. For the lumbar punctures done: there was no growth in more than 80% cases and for imaging studies done: ring-enhanced lesions, meningeal enhancement, and cerebral oedema were each noted in 1 out of 5 cases or less. In terms of outcomes, almost a third of patients died. Of those that survived: 30% remained with neurologic deficits, while 70% recovered completely.
Conclusion: Incidence of CNS infection in this study was 0.673%, more than twice the reported global incidence of 0.389%. Given that HIV Infection is the single most common comorbidity identified in patients hospitalised with CNS infections, it is imperative that all adults with a suspected diagnosis of CNS Infection be tested for HIV.

O-05

A retrospective study of five-year survival rates of women diagnosed with and treated for cervical cancer between 2012 and 2016 at the Georgetown Public Hospital Corporation

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Objective: To determine the five-year survival rate of women who were diagnosed, staged and treated for cervical cancer at GPHC
Methods: A retrospective cohort study of patients' charts from the Georgetown Public Hospital Gynaecology Outpatient Department was conducted for 2012 to 2016. All patients diagnosed at the hospital with cervical cancer during the study period were included in analyses. Survival data was extracted from charts or using contact information provided in charts if there was loss to follow-up. Additional data collected included demographic features, disease stage, presence of comorbidities, smoking and alcohol habits, and treatment received. Frequency and survival analyses were conducted using Stata IC 16.
Results: The mean age of study participants was 54 years, and there was a predominance of Indo-Guyanese (34.1%) followed by Afro-Guyanese (29.5%). Of the patients 20.5% had a pap smear done and 13.6% had visual inspection with acetic acid done prior to diagnosis. In terms of diagnosis, 11.4% presented with stage 1 disease, 50% with stage 2, 31.8% with stage 3 and 6.8% with stage 4. The five-year overall survival rate was 38.6%. Survival rates ranged from 60% in stage 1 disease to 0% in stage 4 disease. A regression model showed no association was between survival and disease stage when controlling for comorbidities, treatment received and age. Increasing age was the only significant predictor of dying from cervical cancer (OR 1.06, 95% CI 1.01, 1.10).
Conclusion: Survival decreases with increasing age, indicating a need for patient education and early diagnosis through regular screening programmes to increase five-year survival rates.

O-06

ADHERENT Study: Assessment of type 2 Diabetes mellitus pharmacological adherence in primary HEalthcare facilities Regarding social inEqualities aNd Technology use

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Objective: To investigate the socioeconomic and technological factors influencing pharmacological non-adherence among patients diagnosed with type 2 diabetes mellitus (PLWT2DM) adults in public and private primary healthcare clinics in Barbados.
Methods: A quantitative method was used as a sequential study following a qualitative study to strengthen the theoretical links. Patients (n=276) from both private and public

primary healthcare, were either sent a link via email to the REDCap website to complete the questionnaire online or issued a paper copy. The paper copies were entered on the REDCap website.
Results: Adherence was significantly associated with financial challenges (38.5%), psychological factors (58.3%), when patients ran out of medication (58.7%), when they were prescribed too many medications (65%), when side effects of the medication was experienced (77.4%), when patients had concerns that medications are harmful (69.8%), due to forgetfulness (96.6%), having preference towards alternative remedies (63.6%) and the patient's personal beliefs (40.5%). Smartphone technology with pill reminders and health education was found to improve adherence behaviour.
Conclusion: A holistic approach is needed to improve adherence among diabetes mellitus patients based on the factors related to social inequalities, behavioural factors, barriers to adherence such as psychological factors, especially anxiety and depression, and personal preferences. Future research to investigate how the gaps causing non-adherence can be narrowed through smartphone technology with features inclusive of pill reminders and health education is needed.

O-08
Studies on the zoonotic potential of sars-cov-2 from dogs and cats

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Objective: SARS-CoV-2 is highly contagious virus known to infect humans and animals. Numerous reports have shown that the virus infects humans, wildlife, domesticated and farm animals. Zoonotic variants of the virus have shown to have risen and may have implications for global health. The aim of this study was to determine if dogs and cats in households with and without human SARS-CoV-2 infection might act as potential reservoirs for SARS-CoV-2.
Methods: This cross sectional study was conducted from August 2020 to April 2022 among dogs (144) and cats (22) in households (17) with and without (79) cases of human SARS-CoV-2 infection in Grenada. Nasopharyngeal and oropharyngeal swabs were taken from the dogs and cats to detect SARS-CoV-2. Samples were stored on ice and transported to the Laboratory to process using qRT-PCR, targeting the E and RdRP genes respectively
Results: 16 (11%) out of 144 dogs and 5 (23%) out of 22 cats tested positive for SARS-CoV-2. The positive animals were found in 17 (18%) of households with positive individuals. No positive pets were detected in households without COVID-19. Significant (p-value < 0.0001) and a large positive association (effect size phi=0.64) was found to exist between humans with COVID-19 and their pets. Sequence analysis of positive pets were 100% identical to SARS-CoV-2.
Conclusion: This study confirms the detection of SARS-CoV-2 infections in cats and dogs in Grenada. All infections in pet animals had a SARS-CoV-2 positive owner. Human and pet animals were positive synchronously, but the route of transmission from humans to their pets or their pets to humans remains equivocal. A review of the available global literature on the potential for zoonotic maintenance or transmission to humans from pets will be presented.

O-09
Patterns of interpersonal violence injury location by weapon type

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Objective: To examine the distribution of injury locations of interpersonal violence injuries based on the weapon used.
Methods: The Caribbean Firearms Study was conducted in 2022 by the George Alleyne Chronic Disease Research Centre, Small Arms Survey and CARICOM Implementation Agency for Crime and Security (IMPACS). The study retrospectively reviewed 298 medical records of interpersonal violence injuries from 2019, in Barbados, Bahamas and Jamaica. The patient data from this study was further analysed to assess the distribution of the anatomical injury locations seen as it relates to the weapon used
Results: The data reveals that there is predominance of lower extremity and pelvis injuries caused by firearms, head and neck injuries caused by blunt weapons and abdominal and chest injuries caused by sharp weapons. Almost a third of patients had injuries in more than one anatomical location.

Conclusion: These findings correspond to prior studies on the common locations for firearm, blunt and sharp weapon injuries. These patterns of injuries seen with particular weapons, can help to explain resource utilisation required for treatment. We intend to undertake further analysis on the data to determine how location of injury as well as severity of injury influences the medical resources used, patient disability outcomes and the out-patient resources required.

O-10

Women's attitudes towards domestic violence in Guyana: A time trend analysis.

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Objective: To describe trends in women's attitudes towards domestic violence in Guyana.
Methods: Data from three nationally representative surveys conducted from 2009 to 2019 were evaluated. The prevalence of women who believed a husband was justified in beating his wife if she: goes out without telling him, neglects the children, argues with him, refuses sex with him, and burns the food were the main indicators we analyzed. We stratified the analyses by geographic location, ethnicity, and wealth quintile index. We calculated the slope index of inequality and the concentration index of inequality to assess differences in women's attitudes justifying domestic violence over time. We estimated the average absolute annual change of each outcome using a weighted variance regression.
Results: The overall prevalence of women who believed a husband was justified in beating his wife for any of the five reasons declined from 16.3% (95% CI: 15.8-16.7) in 2009 to 10.8% (95% CI: 9.1-11.2) in 2019. This equated to an average annual reduction of -0.53% (p=0.004), a significant downward trend. Important differences were noted between subgroups, with the poorest women and those living in rural areas showing the greatest disparities. The slope index of inequality for the combination of the five reasons decreased from -20.02 in 2009 to -14.28 in 2019. The concentration index remained relatively constant over time.
Conclusion: Guyana experienced diminishing prevalence and inequalities among various subgroups in terms of women's attitudes justifying domestic violence. Nonetheless, justification of domestic violence remains high and additional efforts are needed to reach rural and economically disadvantaged women.

O-11

Masculinities, men's health, and interpersonal violence in the Caribbean

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Objective: To analyze how masculinities in the Caribbean may be contributing to shaping and affecting male mortality and health-related perceptions and behaviors related to interpersonal violence.
Methods: This analysis was compiled based on literature review, analysis of available data, and information gathered through stakeholder surveys and interviews.
Results: Interpersonal violence is the leading cause of death for young men in the Caribbean, with one in every four deaths in the age group 15–34 years caused by interpersonal violence in 2019. The distribution of fatal and nonfatal interpersonal violence is not equal: young black males and poor, lower-educated males are disproportionately affected. According to Caribbean scholars, Caribbean masculinities are shaped by the history of the Caribbean characterized by colonialism, slavery and indentureship and the ethnic, linguistic, and religious dimensions, all with their own power dynamics. Key social determinants of masculinity in the Caribbean, including race/ethnicity, education and income, gender, and sexual identity. The analysis identifies a hegemonic Caribbean masculinity characterized by aggression, hypersexuality, risk taking and substance use
Conclusion: Promoting positive masculinities may contribute to reduction of violence-related male mortality and morbidity in the Caribbean. This will require structural and multi-sectoral approaches targeting individuals, families, and communities and strategic investments to promote, support and improve opportunities for males to adopt and express positive masculinities and healthy behaviors without fear of repercussions.

O-12

Adverse Childhood Experiences among English-Speaking Caribbean Adults Raised Without Corporal Punishment in the Home

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Objective: Adverse childhood experiences (ACEs) are potentially traumatic events that occur during childhood and increase the risk of mental illness and poor physical health

outcomes. Most research on ACEs has been conducted in high-income countries (HICs). The objective of this study was to provide insights on ACEs in a sample of English-speaking Caribbean adults raised without corporal punishment (CP) in the home.

Methods: Fifty-eight participants completed an online questionnaire that included an adapted version of the Adverse Childhood Experiences Questionnaire (ACE-Q). Thirty-four participants also participated in a qualitative interview that further explored ACEs in a wider context.

Results: From the ACE-Q, 70.5% of participants reported at least one ACE. While parental separation or divorce was the most common ACE (37.9 %), ACEs were also experienced in school and community settings, as illustrated by interview excerpts. Although the item on sexual abuse was excluded from the questionnaire, six participants disclosed experiences during qualitative interviews.

Conclusion: ACEs in the home are prevalent in Caribbean countries, even in populations who were raised without CP in the home. It is possible that our study population, as a self-identified sample who did not experience CP in the home, experienced fewer ACEs than the general population in this setting. This will need to be explored in future studies. Findings from this study indicate that future studies should include assessment of ACEs in the school and community settings, and include standard items on ACEs related to sexual abuse or violence.

O-13

A hungry youth is a angry youth: The exploration of food insecurity and school-based violence among Caribbean youth

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Objective: The purpose of this study was to investigate the relationship between food insecurity and school-based violence among Caribbean youth.

Methods: The study used data from the 2017 Jamaica and 2018 St. Lucia datasets of the Global School-Based Student Health Survey, with weighted samples of 1667 Jamaican students (60% response rate) and 1953 St. Lucian students (77% response rate). Key indicators of school-based violence and food insecurity were recoded as dichotomous variables. Covariates included demographics, substance use, loneliness, and suicidal ideation/attempts. Descriptive statistics and weighted multivariate logistic regression, adjusting for covariates, were conducted using IBM SPSS Version 25 to explore the relationship between food insecurity and school-based violence indicators.

Results: Approximately 27.5% of Jamaican and 28.4% of St. Lucian students reported school-based violence.

While 29% of Jamaican and 30% of St. Lucian students suffered from food insecurity. Food insecurity significantly correlated with violence indicators (Jamaica: p-value= 0.004- 0.001, St. Lucia: p-value= 0.03- 0.001), especially among those aged 15 or younger, males, and those with drug use or suicidal measures. The odds of physical attacks were about 2 times greater for students experiencing food insecurity in both Jamaica (OR=1.802, 95% CI:1.39 - 2.34) and St. Lucia (OR=1.921, 95% CI:1.53 - 2.42). Male students showed significantly lower odds in two school-based violence indicators (physical attacks and physical fights) if they were food insecure. At the same time, substance use and mental health factors were significantly associated with all school-based violence indicators in both samples.

Conclusion: There was a significant relationship between food insecurity and school-based violence among Caribbean youth, highlighting that these issues are still prevalent and need long-term intervention plans. By designing school-based programs that address both issues within a single program, islands can reduce the rates of two major issues that affect youth academic and social outcomes, while saving time and resources from a combined program.

O-14

Examining the context within which interpersonal violence injuries occur in the three country sites – The Bahamas, Barbados and Jamaica.

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Objective: To examine the context within which interpersonal violence injuries occur in the three country sites – The Bahamas, Barbados and Jamaica of the Caribbean Firearms Study.

Methods: In 2022 through a collaborative effort by Small Arms Survey, CARICOM Implementation Agency for Crime and Security (IMPACS) and the George Alleyne Chronic Disease Research Centre the Caribbean Firearms

Study was conducted. Data was obtained through a retrospective review of 298 medical records of persons who received injuries as a result of interpersonal violence in the Bahamas, Barbados and Jamaica from 2019.
Results: Of the 298 medical records which were reviewed, 101, 100 and 97 were from the Bahamas, Barbados and Jamaica respectively. When stratified by gender the results showed that interpersonal violence injuries were higher among males victims 84% (251 cases) than that of female victims (16%). Fighting/argument was the context of the incident with the highest percentage of interpersonal violence injuries in the Bahamas and Barbados - 60% and 37% respectively and second highest in Jamaica- 35% of cases. Robbery also featured among common causes across countries, being seen in 3% of cases in the Bahamas and Jamaica and 12% in Barbados. In a high percentage of cases, the context was not documented, 28% in Barbados and the Bahamas and 50.5% in Jamaica.
Conclusion: These findings align with previous studies that show in most cases the contributing factor to interpersonal violence injuries is usually that of fighting/an argument. By understanding the context in which these incidents occur, the public health approach can be geared toward developing conflict resolution strategies to combat the rising incidence of interpersonal violence in the Caribbean. These findings also provide implications for future research.

O-15

The lived experience of women in Intimate Partner Violence (IPV) relationships in rural communities in Trinidad

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Objective: To explore the lived experienced of women in intimate partner violence relationships, in rural communities in South Trinidad.
Methods: A qualitative, case study research. The 10 participants chosen by snowballing came from the rural communities of south – east Trinidad. Key informant interviews collected the data. Interviews were audio taped, transcribed and subjected to thematic analysis. of participants' experiences. Using the Van Manen's phenomenology, this study explored the subjective meanings.
Results: Four themes identified were (i) Common factors associated with intimate partner violence, (ii) Decision making, (iii) Coping and (iv) Common responses of attitudes and feelings to intimate partner violence. Participants even though they dealt with varying situations that constitute Intimate partner violence, there were commonalities and similarities in their lived experiences. Abusers insidiously and subtly exerted control and power over participants, who influenced by limited options, decided to stay or return, for instance, lack of support. Decisions led participants to adopt strategies like spirituality to cope with their daily struggles. At times strategies used were extreme in nature. Consequently, participants exhibited common attitudes and behaviours from their lived experiences.
Conclusion: IPV continues to be manifested as total control, power and manipulation with resultant dependency by women on the abusers. While remaining in relationships may be construed as a challenge, for many women, doing so may be associated with strategies for coping , being deliberate in making a decision to maintain the immediate family social network or the development of inerta or living in hope for a change of the experience.

O-16

Self-reported experience of sexual, physical, and verbal violence among university students in Barbados during the COVID-19 pandemic

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Objective: To examine violence reported by university students in Barbados on the National College Health Assessment (NCHA), a standardised measure of tertiary students' health status, behaviours, and use of health systems.
Methods: The NCHA was distributed online to all current students at The University of the West Indies, Cave Hill, from October 2021 to March 2022. Standardized items asked students to indicate their experience of sexual, physical, and verbal violence in and outside of partnered relationships.
Results: 649 students responded to the survey; response rate was approximately 10% (accounting for enrollment fluctuation). The most reported type of violence was verbal abuse by an intimate partner, by almost 15% of respondents. The second most common was verbal threat (not from a partner), which approximately 10% of students had experienced in the past year. Rates of more severe violence, such as forced sexual contact (1.4%) and physical violence (2.3%) from intimate partners, were relatively lower but of serious concern. Women were significantly more likely to experience of unwanted sexual touch outside of intimate relationships.

Conclusion: Our findings document reported sexual, physical, and verbal violence among Barbadian university students. Verbal abuse from partners and verbal threats from others were the most reported experiences, but other types of abuse, including physical and sexual violence, were also reported and are concerning. Sampling limitations and the COVID-19 context limit generalisability of findings. More research to accurately estimate prevalence and elucidate risk factors is needed to inform health and psychosocial support systems for students.

O-17

Quality of Life Among English-speaking Caribbean Adults Raised Without Corporal Punishment–Comparing Quantitative and Qualitative Assessments

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Objective: Most children raised in the Caribbean experience corporal punishment (CP), which increases the risk for poor development and associated behaviors. However, little is known about the health and development of those who were not raised with CP. Current Quality of Life (QOL) is an important outcome to measure among adults who did and did not experience childhood CP. The objective of this study was to describe and compare different assessments of QOL within a sample of Caribbean adults raised without CP.
Methods: This study was part of the No Licks: A Mixed Methods Investigation of Corporal Punishment in the English-Speaking Caribbean study. Fifty-eight adults completed an online questionnaire including questions adapted from the World Health Organization Quality of Life - BREF (WHOQOL-BREF). The WHOQOL-BREF QOL item, "How would you rate your quality of life?", was rated on a 5-point Likert scale (1=very poor; 5=very good). Thirty-four respondents also participated in a qualitative interview, which included the question: “How do you perceive your quality of life?/ How do you view your position in life?”. Responses to quantitative and qualitative QOL questions were compared.
Results: In this study, QOL among English-speaking Caribbean adults raised without CP was good. The WHOQOL-BREF QOL item appears to be appropriate and relevant to the population included in this study. Missing middle Likert scale labels may account for the discrepancy in responses given in the interviews.
Conclusion: No participants rated their QOL as very poor or poor (‘1’ or ‘2’), 8 participants selected ‘3’ (assigned label neither poor nor good), 18 participants selected ‘4’ (assigned label good), and 8 participants selected ‘5’ (very good). Most (82.35%) of the qualitative responses aligned with the quantitative responses. Future studies will compare this outcome among populations that did and did not experience childhood CP.

O-18

Perceived Safety in U.S. Virgin Islands’ Public Secondary Schools: Implications for Student Learning and Overall Student Health

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Objective: To examine the perception of school safety from the perspective of students and staff at secondary public schools in the U.S. Virgin Islands.
Methods: In late spring of SY2022-2023 and early fall SY2023-2024, 306 students attending public secondary schools across USVI and 72 staff teaching at schools with students in grades 7–12, participated in this study. The Safe Schools Survey – secondary students’ version (grades 7–12) and the Safe Schools Survey – staff version was used for data collection. SPSS 28 was used for data analysis.
Results: Response rates were modest, at 72% for staff and at 61% for students. Most survey subscales yielded acceptable to excellent reliability (a=.81) for USVI study participants. Yet, reliability of some subscales was fair (a=.61) to poor (a=.49). The findings reveal that most students do not feel a sense of belonging in their schools. Most do not feel that they can go to school staff for support and assistance. They do not feel particularly safe at their schools. Staff felt a higher sense of belonging in their schools (78% vs 26%) compared to students and differed markedly from students in that teachers worked hard to make students successful (91% vs 38%). Staff were more inclined to agree or strongly agree that students engaged in incivility and disruptive behaviors than students perceived. Discrepancies in perceptions of staff and students on approximately 50% of survey items ranged from an 11% discrepancy to a 53% discrepancy. There were significant differences in the mean scores for staff and students on Belongingness ($t=6.6$, $p<.01$) and Incivility/Disruption ($t=-3.0$, $p<.05$).
Conclusion: There may be a need for intervention, particularly around getting an understanding as to why students feel disconnected from their schools, while staff perceive that they are available for and adequately support students.

O-19

The Youth Resilience, Inclusion, and Empowerment Program: Using the Public Health Approach for the Prevention of Crime and Violence in the Eastern Caribbean

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Objective: Y-RIE developed a mixed-methods research design to identify the most prevalent risk factors for crime and violence among youth populations 10–29, understand how risk factors shape youth life trajectories, and inform the development of a risk assessment tool.
Methods: Using a mixed-methods research design, Y-RIE surveyed 4,694 respondents 10–17 and 18–29, with 1,613 from Saint Lucia, 1,601 from Grenada, and 1,480 from Guyana. The results were used to measure the relationship between exposure to risk factors and participation in problem behaviour. We also interviewed 74 justice-involved youth to better understand how young people experience risk factors that shape their life trajectories towards crime and violence. They also completed the survey to compare their responses with those of the general population.
Results: The sample size allowed for a result in a margin of error (MOE) of ±3.5% on a 50/50% indicator with a 95% level of confidence. The findings isolated risk factors most prevalent and common in all countries at the individual, family, and community levels. Negative peer influences and adverse childhood experiences (ACEs) presented as prevalent and common risk factors with the largest effect on self-reported problem behaviour. Using receiver operating characteristic (ROC) curve analysis, Y-RIE developed a risk assessment tool using seven identified risk factors. Y-RIE will apply this Youth Social and Family Environment (Y-SAFE) tool to determine young people who are "at-risk" and eligible for programming.
Conclusion: Isolating prevalent risk factors among Caribbean youth enhances targeted risk-reduction programming that builds specific resilience and protective factors. Y-RIE's programming will offer soft and other skills and integrate principles recommended to build protective factors and prevent violence across one or more risk levels. Y-RIE will continue to document lessons from the Y-SAFE roll-out and dedicated risk-reduction programming to enhance Caribbean knowledge and practice for stronger evidence-based youth violence prevention.

O-20

The development of Trinidad and Tobago's first National Clinical and Policy Guidelines on Intimate Partner Violence and Sexual Violence

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Objective: To outline the development process of National Clinical and Policy Guidelines on Intimate Partner Violence (IPV) and Sexual Violence (SV) in Trinidad and Tobago (T&T). The Guidelines aim to support implementation of quality standards for IPV and SV survivors.
Methods: The process included a review of relevant national legislation, policy, and practices, Pan American Health Organization/ World Health Organization (PAHO/ WHO) and other guidance documents on healthcare for women subjected to violence. Evidence-based practices from these documents were included in consultations on their appropriateness in the T&T context. Multidisciplinary teams of frontline health workers from each of the five Regional Health Authorities were consulted in groups of 6-13 participants, with individual follow-up discussions about scale up needs (November 2020 – March 2021). Interviews were held with 6 senior stakeholders from the Ministry of Health, Office of the Prime Minister-Gender Affairs, National HIV/ AIDS Coordinating Committee and 4 civil society agencies. A multidisciplinary team of health policy practitioners and PAHO/ WHO oversaw the process and revisions to the Guidelines based on stakeholder feedback.
Results: Participants provided recommendations to integrate quality standards into routine clinical practice. These were incorporated into National Clinical and Policy Guidelines on IPV and SV, consistent with national policy and evidence-based guidance. The Guidelines incorporate human rights principles and pathways of care including the identification of violence, clinical and psychosocial care, safety planning, referrals, prevention and care during public health emergencies. They were approved by the Ministry of Health on 15 August 2022.
Conclusion: The methods outlined provide a systematic approach to facilitate implementation of evidence-based practices. They underscore the importance of government leadership, consensus building, collaboration and feedback from professionals across health, social service and civil society sectors in addressing violence as a public health issue. Training of trainers has been undertaken to ensure implementation.

O-21

Feasibility and readiness assessment of small island developing states for development and strengthening of primary care registries

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Objective: We aim to understand the contextual factors impacting non-communicable disease (NCD) registry development in four small island developing states (SIDS) by assessing feasibility and readiness of implementing an NCD registry.
Methods: We used a sequential mixed methods design to conduct this study in four SIDS. We examined feasibility and readiness, focusing particularly on resource availability (human, financial, technological), leadership and team engagement and access to knowledge and information resources relevant to registry development. We sent an online survey to NCD stakeholders identified through snowball sampling and followed this with four in-depth focus groups (4–8 persons each) which sought to clarify and contextualize the responses to the quantitative survey. Questionnaire development and qualitative analysis were both guided by the consolidated framework for implementation research (CFIR). Focus groups with each of four countries were recorded, transcribed verbatim and analyzed using thematic content analysis guided by theory-based deductively derived coding framework.
Results: Feasibility scores ranged from 13 to 19 (maximum = 28); readiness scores ranged from 3 to 9 (maximum = 9). Respondents reported there was verbal support from the outer setting (political directorate) for the establishment of registries in territories. The inner setting (ministries and clinics) of several territories had structural deficits including the presence of paper-based health information systems, lack of unique identifiers, lack of registry science knowledge and insufficient number of human resources. Individuals interviewed currently conducted many roles and thus it was unclear from several territories who would constitute the registry team. Despite these challenges, leadership engagement was generally high and respondents described that success of these ventures usually relied on the high value/level of relational connectedness that existed.
Conclusion: There was high interest at central government levels in NCD registry development but infrastructural and human resource capacity barriers likely contribute to implementation deficit in all territories.

O-22

Garbage Codes as Underlying Causes of Out-of-Hospital Deaths in East Trinidad, 2022-2023

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Objective: To determine the proportion of garbage codes reported as the underlying cause of out-of-hospital deaths in East Trinidad.
Methods: Cross sectional study was performed.Data on deaths occurring in the communities of East Trinidad from January 2022–August 2023 were reported by District Medical Officers. Variables collected were the address of deceased, date of birth, date of death, age at death, sex, ethnicity, medical cause of death, post mortem requested and the county at which the deceased body was located. The medical cause of death was coded into ICD11 and classified as garbage codes using WHO Digital Open Rule Integrated cause of death Selection. Data was analysed using Excel® version 2108, SPSS® version 27.
Results: Of the reported 150 deaths, 85 (56.7%) were male and 64 (42.7%) were female. The mean age was 66.3 years (SD19.8 years). The most common underlying cause of death included Cardiopulmonary arrest (11.6%), Brought-in-Dead (10.3%), Diabetes Mellitus (6.8%) and Certified (6.2%). Lack of specificity, abbreviations, use of immediate and intermediate causes of death were noted. Of the underlying cause of death, 70 (46.3%) were garbage codes such as Brought-in-Dead (n=13), Cardiopulmonary Arrest (n=7), Certified (n=9), Indeterminate Natural Cause (n=3), Myocardial Infarction (n=3) and (n<3): Kidney Failure Unspecified, Gun-Shot-Wound, Ischemic Heart Disease unspecified, Malignant neoplasms of colon unspecified, Epilepsy. 31 (44.3%) decedents with garbage codes were subsequently referred for post mortem.
Conclusion: There is a need to improve the quality of data reported as medical cause of deaths to accurately inform on burden of diseases and population statistics in a community. Using automated ICD-11 software can assist public health policy makers in deciphering garbage codes.

O-23

Physical Activity, Sedentary Behavior and Muscle Health: The Tobago Health Study

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Objective: Increased skeletal muscle adipose tissue infiltration (i.e. myosteatosis) is now recognized as a major risk factor for cardio-metabolic diseases. Therefore, a lifestyle modification that reduces myosteatosis would be of great public health importance. However, studies examining the association of relevant lifestyle factors with this adiposity depot are lacking, particularly in the Caribbean region. Thus, we examined an association of objective measures of physical activity and sedentary behavior with myosteatosis among Tobagonian African Caribbeans.
Methods: Analyses were conducted among 355 men (mean age 62 years) and 682 women (mean age 59 years), participants of the Tobago Health Study. Objectively measured physical activity (PA) and sedentary behavior (SB) were collected using Bodymedia SenseWear armbands worn over 7 days. Calf muscle area (cm^2) and muscle density (mg/cm^3, a marker of intra-muscular fat), were measured using Stratec XCT-2000 scanner.
Results: Women spent less time in light PA (LPA) (144 vs. 270 min/day) and moderate to vigorous PA (MVPA) (14 vs. 41 min/day), but more time in SB (813 vs. 645 min/day) than men (age-adjusted $p<0.0001$). Muscle density was lower (i.e. more muscle adiposity infiltration) among women (71.7 mg/cm3) compared with men (72.7 mg/cm3; age- and BMI- adjusted P=0.037). After adjusting for age, BMI, smoking and alcohol intake, in both women and men, MVPA was positively associated with muscle density ($r=0.08$ and 0.18, respectively, $P<0.05$) and muscle area ($r=0.11$ and 0.20, respectively, $P<0.05$), while LPA was positively associated with muscle area only ($r=0.08$ and 0.11, respectively P=0.05).
Conclusion: Our novel findings indicate that there is significant association between MVPA and myosteatosis and muscle area among Tobagonian African Caribbeans, while LPA may be relevant for muscle area only. Promoting interventions to increase physical activity intensity may have an impact on lowering myosteatosis, an adipose tissue depot with an emerging role in cardio-metabolic health.

O-24

Enablers, challenges, and benefits of multilevel intersectoral collaboration for NCD Prevention: The Kalinago in Dominica

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Objective: To assess the perceived enablers, challenges and benefits of a multilevel intersectoral NCD prevention program, Congregants Taking Action Against Non-Communicable Diseases (CONTACT), with the Kalinago community in Dominica.
Methods: Partnerships included local primary care, Kalinago Leaders, Church Leaders, and central government agencies. CONTACT implemented nature gardening, screening for NCD risk factors and health education over 10 months. Evaluation used pre- and post-implementation longitudinal qualitative interviews (n=52, 28 females, 24 males) with Kalinago health advocates, Kalinago congregants, primary care nurses and religious leaders. Interviews were analysed using thematic analysis.
Results: There were 13 themes and 28 sub-themes. Enablers: (i) motivations of RHAs - altruism, community health improvement, enhance knowledge and skills; (ii) value of community engagement- research and primary healthcare partnerships; (iii) community-centeredness- church as a trusted institution and community support; (iv) cultural centeredness - shared cultural identity; (v) faith-based approach-aligning religious teachings with health messages. Challenges: (i) lack of professional recognition for RHAs - professional scepticism and reluctance to share personal information; (ii) resource limitations- insufficient health education materials, insufficient gardening resources, financial & time constraints; (iii) accessibility to programme sites - lack of transportation; (iv) environmental challenges- poor soil quality and lack of water; (v) COVID-19. Benefits: (i) strengthening the healthcare system- reduced nurses' workload, increased access to screenings and referrals for specialist care; (ii) promoting a healthy lifestyle - improved health education, encouraged physical activity, provided access to fresh vegetables, increased vegetable intake (iii) community diffusion- community dialogues, communal sharing, adoption of backyard home gardens.
Conclusion: It is possible to successfully implement multisectoral collaboration for NCD prevention with Indigenous communities in the Caribbean. This study highlights potential transformative strategies for NCD prevention in the Kalinago community, which are relevant to both Indigenous and non-Indigenous contexts.

O-25

Assessing the effectiveness of a gym-based childhood obesity management program and the implementation of the addition of a nutrition education curriculum

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Objective: To assess the effectiveness of a gym-based childhood obesity management program and evaluate the

implementation of a six-week nutrition education curriculum as an enhancement to the gym-based program.
Methods: Phase 1 was a retrospective chart review of 238 children aged 6–19 years with obesity who participated in weekly physical activity (PA) sessions from October 2016 to January 2023. Mean body mass index (BMI), body fat percentage (BFP), and systolic blood pressure (SBP) were calculated at baseline. Mean change and 95% confidence intervals for BMI, BFP, and SBP were calculated at three, six, and twelve months. Phase 2 was a Type 3 implementation-effectiveness pilot study that followed 24 children aged 7–16 years who participated in six nutrition education classes. Effectiveness was assessed using paired Wilcoxon signed rank tests for median differences in health behavior surveys (HBS) results and BMI, SBP, and waist circumference (WC). Implementation was assessed using thematic analysis of semi-structured interviews with implementers and participants' parents.
Results: In phase 1, a decrease in SBP of 4.29 mmHg, 95% CI [-8.53, -0.06] over three months in girls aged 12–19 years and a decrease in SBP of 9.91 mm/Hg, 95% CI [-16.82, -2.99] over twelve months in boys aged 12–19 years was observed. In phase 2, there were no significant differences in BMI, SBP, WC, or HBS results. Interviews with participants' parents revealed increased consumption of fruits and vegetables and decreased consumption of ultra-processed foods. Interviews with implementers revealed barriers such as staffing and scheduling conflicts.
Conclusion: The weekly PA sessions were effective in reducing SBP over three months in girls aged 12–19 years and over twelve months in boys aged 12–19 years. The curriculum did not significantly improve anthropometric measurements through six classes but was noted to be acceptable to parents and implementers.

O-26

An assessment of the knowledge, attitudes and practices regarding ultra-processed foods among residents of Trinidad and Tobago: a social media study

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Objective: To assess the knowledge, attitudes, and practices of ultra-processed foods among social media users in Trinidad and Tobago.
Methods: An online self-administered questionnaire was used to collect the data. A snowball sample of participants was selected to represent a quota sample of participants. The sample size was determined by the number of participants who submitted a completed questionnaire (512 respondents). The data was analysed using SPSS version 29. Descriptive statistics were used to summarize the data. One-way ANOVA was used to test the relationships between the independent and dependent variables.
Results: A total of 512 social media user participated in the study. The overall nutrition knowledge, attitude, and practice scores were 7.09 ± 3.87, 3.40 ± 1.59, 12.50 ± 2.96, respectively. Most participants were somewhat knowledgeable (79–60%) on 8 out of the 11-nutrition knowledge questions and not knowledgeable in 3 out of 11 nutrition knowledge questions. Many individuals (n=406, 79.3%) had a favourable attitude, 43 (8.4%) had a negative attitude and 63 (12.3%) moderate attitude. Two hundred and six (n=206) participants stated that product packaging has a significant influence on their choice to purchase UPF. There was a statistically significant difference between knowledge and sex (male and female) as demonstrated by one-way ANOVA ($F = 12.56$, $p < 0.001$).
Conclusion: The study revealed that social media users in Trinidad and Tobago have a limited understanding of proper nutrition and generally lack awareness regarding the classification of foods according to their level of processing. However, more research using other sampling methods and larger sample sizes may be required to establish the findings' general validity.

O-27

Primary Care Physicians' Practices and Barriers in Evaluating and Managing Chronic Kidney Disease in New Providence, The Bahamas

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Objective: To assess the practices and barriers in evaluating and managing chronic kidney disease among primary care physicians in New Providence, The Bahamas.
Methods: A cross-sectional study utilizing an anonymous, self-administered questionnaire was given to General Practitioners, Family Medicine, and Internal Medicine physicians after using a simple random sampling approach. Descriptive and inferential statistical analysis was conducted using IBM SPSS software.
Results: There were 119 physicians in this study with Family Medicine specialty area representing 52.1%. Seventy-four (74) physicians reported following CKD guidelines. The most common at-risk groups identified were Diabetes Mellitus (100%), Hypertension (98.3%), and use of nephrotoxic agents (97.5%). The most common diagnostic test used to identify CKD was eGFR (97.5%) and 72.2% of physicians used eGFR alone to stage CKD. Physicians overall agreed (40.3 – 50.4%) they were comfortable in diag-

nosing and managing CKD and its complications except for bone disorders (43.2%) and metabolic acidosis (34.7%) where responses were neutral. Physicians were neutral in having tools/resources to help them manage bone disorders (35.3%) and metabolic acidosis (31.9%) and disagreed to having educational tools for patients to understand bone disorders (32.2%) and metabolic acidosis (32.8%). Physicians agreed-strongly agreed with 12 of 13 perceived barriers, and there were 26 unique barriers expressed (8 patient-level, 7 provider-level, 11 systems-level).
Conclusion: Deficits in the evaluation and management of CKD, and numerous barriers to CKD care were discovered. Recommendations include the development of a national CKD guideline, local CKD continuous medical education seminars, and public health campaigns on CKD education.

O-28
Cancer burden in Tobago, West Indies

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Objective: To determine the cancer burden in the island of Tobago West Indies and to develop a cancer registry for the island of Tobago.
Methods: This was a etrospective study. Cancer diagnosed during the period 2018–2023 at the department of Pathology at the Scarborough General Hospital were collected with their demographics. All the surgical specimens received in the histopathology laboratory were examined and those dignosed with cancer formed the basis of this study. The total number of surical specimens received was 6204 and the total number of cancers diagnosed was 742, which accounted for 11.9% of all surgical specimens recieved.
Results: Prostate (215), Breast (181) and Colorectal (91) carcinomas were the most common cancers diagnosed during the study period. Female gynecological cancers; endometrium, cervix and ovaries accounted for 58.7%, 29.7% and 11.6% of all gynecological cancers respectively.
Conclusion: In Tobago, prostate cancer had the highest prevalence among males and breast cancer had the highest incidence among female. Endometrial cancer was the second most common cancer in females. Colorectal cancer was also prominently featured in this study being second and third most common cancer diagnosed in males and females respectively. Cancer screening should be directed towards its early detection. There is a need for a cancer registry on the island, so that health agencies can plan oncology policies specific to the needs of this population.

O-29
The trend of stroke hospitalizations in the Academic Hospital of Paramaribo by sociodemographic and geographical differences from 2018 to 2021: a retrospective study.

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Objective: This study aims to analyze the trend by sociodemographic factors and geographical differences for stroke hospitalizations over the period 2018 to 2021 at the Academic Hospital Paramaribo (AZP), This is important to identify vulnerable populations in order to inform resource strategies.
Methods: This retrospective study, conducted with data from the AZP, Suriname's largest hospital, analyzed stroke admissions (ICD 160-169 Code) from January 1, 2018, to December 31, 2021. The investigation included sociodemographic factors (age, gender, ethnicity) and geographical differences (across 10 districts), employing the one-way ANOVA (numeric data) and Chi-square tests (categorical data) for statistical analysis.
Results: A total of 3707 stroke hospitalizations were analyzed across four years. There was a significant decrease in the number of hospitalizations across the four years ($F(3287,419)=1.9$, $p < 0.01$). The mean age of patients admitted to the hospital was similar across the four years (63±14.6years), ($F(3,3703)=1.8$, $p=0.13$) and there was a similar hospitalization rate for men and women ($x2(3,3707) = 7.52$, $p=0.057$). More people from the coastal area were admitted compared to the rural areas ($x2(30, 3707) = 45.02$, $p=0.038$). Compared to other ethnic groups, more Hindustanis were admitted ($x2(24, 3707) = 39.64$, $p=0.023$).
Conclusion: Our results have demonstrated an increasing trend in the rate of Hindustanis from the coastal area admitted for stroke followed by the Creoles as the second largest ethnic group. This study has compelling importance for prevention efforts and suggests more research including sex-specific factors as well as the impact of the covid pandemic.

O-30
A Research Agenda to Support Evidence Generation and to Inform Policy Decisions on Vector-borne Diseases in the Caribbean

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Objective: To develop the Caribbean Vector-Borne Disease Network Research Agenda to address health priori-

ties and assist in planning and policy formulation towards the improvement of the health status in CARPHA member states.

Methods: The development of this agenda consisted of a multi-stage process, including a rapid review of existing evidence, qualitative consultations with global and regional experts, and the prioritization of the research domains and themes by the Caribbean Vector-Borne Disease Network Steering Committee.

Results: The findings revealed the complex interplay of factors influencing the prevalence and management of vector-borne diseases (VBDs) in the Caribbean. The research identified the region's varied responses to VBDs, underscoring the need for strategies that are adaptable to different political and social environments. The agenda highlighted key assets and strengths, such as regional collaboration, expertise in vector control and community engagement. It also identified and prioritized 11 research domains and 38 corresponding themes aiming at improving knowledge, prevention and control through effective strategies, strengthening surveillance for early detection, monitoring, and response, supporting capacity building through training programs and workshops, as well as promoting collaboration and information sharing among stakeholders to address VBDs collectively. Specific recommendations emphasized the importance of data-driven approaches and the integration of health strategies with environmental management, especially in the context of climate change and its impact on the spread of VBDs. The research agenda also stressed the need for better resource allocation and the development of a robust health infrastructure to combat VBDs effectively.

Conclusion: Developing a comprehensive and tailored research agenda for VBDs in the Caribbean is crucial for addressing the challenges these diseases pose in the region. By focusing on key research priorities and fostering collaboration between public health institutions and academia, CARPHA seeks to improve public health outcomes, enhance vector control efforts, and mitigate the impact of VBDs in the Caribbean region.

O-31

The impact of the coronavirus disease 2019 pandemic on stroke hospitalizations in the Academic Hospital of Paramaribo with data from 2018 to 2021: are there reasons for concern?

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Objective: This study aimed to compare the number of stroke hospitalizations during COVID-19 pandemic (2020–2021) to comparable data from preceding years before COVID (2018–2019) admitted to the Academic Hospital of Paramaribo (AZP). The findings from this study may show which groups are more vulnerable and were disproportionately affected and may aid in the development of tailored stroke health care.

Methods: Our database consisted of the number of new stroke hospitalizations and was restricted to the period of 1st Januari 2018 – 31st December 2019 (pre-COVID period) and comparable months in 2020 to 2021 (during COVID). Moreover, sociodemographic data (age, sex, ethnic and geographic background) was collected. The T-test (numerical data) and Chi-square test (categorical data) were used for statistical analysis.

Results: The number of stroke hospitalizations decreased (3%) during the pandemic ($t(3705)=-104.62$, $p<0.00$). The mean age of patients admitted pre-COVID (62.9 ± 14.7 years) was similar to those admitted during COVID (63.9 ± 14.4 years), ($t(3705)=-2.26$, $p=0.23$). Moreover, there were consistently more men admitted than women in AZP (17% before COVID versus 8% during COVID) with an increase of women admitted during COVID ((2.6%), ($x2\ (1,1)=7.33$, $p<0.00$). More Asians were admitted (49.7%) compared to African (34.7%) and Other (15.6%) ethnic groups during COVID ($x2\ (2,2)=9.16$, $p=0.01$). The people admitted to the hospital came from similar districts when the pre-COVID period was compared to the COVID period ($x2\ (3,3)=5.85$, $p=0.11$).

Conclusion: According to our findings both men and women and people with an Asian background were vulnerable regarding stroke hospitalization during COVID. These groups require personalized interventions.

O-32

Severe Dengue Cases with Multivisceral Failure Admitted to an Intensive Care Unit: A Prospective Study in Martinique

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Objective: Since July 2023, the ongoing dengue epidemic in Martinique has led to over 45,000 diagnosed cases, resulting in nearly 696 hospitalizations across Martinique and Guadeloupe. Among these, 71 severe cases required intensive care unit (ICU) admission due to multivisceral failure, presenting with hematological, cardiovascular, and hepatic impairments. To date, the epidemic has directly caused 13 fatalities in these French Departments of America. This study aims to thoroughly assess the clinical characteristics and complications of severe dengue cases.

Methods: This prospective study was conducted in the medical ICU of the University Hospital of Martinique, including all patients admitted since July 2023 with a confirmed dengue diagnosis. Diagnosis was determined through early tests using gene amplification (RT-PCR) or NS1 antigen detection and late tests for specific IgM and IgG antibodies. Data are presented as median [range] or percentages.
Results: From July 1 to December 10, 2023, 295 patients (140 males/155 females, median age 51 years [range 31-67]) were treated for dengue. Of these, 43% underwent RT-PCR testing, identifying serotype 2 in 100% of the cases. Overall, 114 (38%) required hospitalization, with 26 (20 males/6 females, median age 56 years [range 18 months-77 years]) presenting with severe dengue fever. Among severe dengue cases, 9 patients (35%) had pre-existing conditions, such as sickle cell disease, diabetes, heart failure, chronic alcoholism, and/or epilepsy. Six patients succumbed to complications, including multiple organ failure (33%), refractory hypoxemia (13%), and cerebral hemorrhage (8%).
Conclusion: This study highlights the potential severity of dengue fever. Key indicators of severity include acute hepatitis and significant thrombocytopenia. Despite intensive care efforts, the mortality rate is 30%, emphasizing the need for ongoing research and vigilance to manage severe dengue cases during epidemics.

O-33
The Public Health importance of Detecting Enveloped and Non-Enveloped Viruses in Wastewater

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Objective: Improvement of wastewater surveillance tools aimed at recovery of enveloped and non-enveloped viruses in wastewater to facilitate the implementation of public health emergency programs.
Methods: Composite wastewater samples were collected. The first aliquot (non-flocculated control) was spiked with a known concentration of: 1) Pseudomonas syringae virulent phage 6 (Phi 6), an enveloped virus, and 2) the coliphage MS2, a non-enveloped virus. Two Methods were evaluated: Method 1 was an aluminium driven flocculation system that used acidification at pH 3.5 before spiking with the viruses. Method 2 was an aluminium driven flocculation system that used acidification at pH 6.0. Viral RNA was extracted, and RT-qPCR performed.
Results: The average Ct reduction of Phi 6 and MS2 show a higher yield for Method 2 than Method 1: Phi 6 (-2.79 ±3.16 [CI 95% -5.95 – 0.37] Method 1 and 3.45 ±2.5 [CI 95% 0.92 – 5.98] Method 2) and MS2 (0.06 ±3.64 [CI 95% -3.58– 3.70] Method 1 and 3.91 ±1.67 [CI 95% 2.234 – 5.582] Method 2). The student's t test found a significant difference at 95% confidence in the recovery of Phi 6 (p=0.001) and MS2 (p=0.02) between the two methods.
Conclusion: The results indicate that the aluminium concentration with acidification to pH 6.0 before flocculation can successfully be implemented to concentrate and recover both enveloped (like SAR-CoV-2) and non-enveloped viruses for Public Health surveillance.

O-34
An assessment of sputum cultures in patients at the Infectious Disease Hospital in Guyana during the COVID-19 era

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Objective: To investigate the prevalence of bacteria and fungi from sputum cultures, obtained from COVID-19 patients from the Infectious Disease Hospital, and to determine antimicrobial susceptibility patterns.
Methods: A retrospective examination of laboratory records was conducted for 116 patients from March 2020-March 2023. Results from sputum cultures indicated the microorganism identified and antibiotic susceptibility testing (AST) results; and whether the patient was COVID positive or negative. Data were analysed to determine prevalence of bacteria and fungi, susceptibility patterns and to compare the susceptibility patterns to the COVID-19 status of the patients.
Results: A total of 186 isolates were observed, of which 146 (78.5%) were bacteria, 13 (7%) were fungi and the rest were normal flora. There were 58 COVID-19 positive patients and 58 COVID negative patients. Of the 159 identified pathogens, 86 (54.1%) were from COVID positive patients and 73 (45.9%) were from COVID negative patients; 146 (92%) were bacteria and 5 (8%) were Candida sp. No antifungal susceptibility testing was done. Klebsiella pneumoniae; Acinetobacter sp. and Pseudomonas aeruginosa were the most prevalent bacteria for both COVID positive and negative patients. In patients positive for COVID-19, K. pneumoniae was susceptible to gentamicin (70%) and ciprofloxacin (65.5%); and susceptible to imipenem (41%) for the negative cases. For COVID positive patients, Acinetobacter sp. was susceptible to piperacillin-tazobactam (66.7%) and imipenem (50%); and showed susceptibility to ceftazidime (60%) and ciprofloxacin (60%) in negative patients. For

COVID-19 positive patients, P. aeruginosa was susceptible to piperacillin-tazobactam (56.5%) and in the negative cases, susceptibility was seen for gentamicin (45.8%) and ceftazidime (45.8%). Pairwise comparisons using Wilcoxon Rank Sum Test showed no statistical differences between susceptibility and COVID-19 status.
Conclusion: Our recommendations include rigorous epidemiological surveillance using our study as a template and sharing our findings with the Infection Control Committee and Pharmacy Department.

O-35

Complementary and Alternative Medicine views and practices for the treatment and prevention of COVID-19 symptoms. A Cross Sectional Analysis in East Trinidad, 2022.

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Objective: To assess the attitudes and practices of patients with COVID-19 illness on the use of Complementary and Alternative Medicine (CAM) in the treatment of the COVID-19.
Methods: A cross sectional study was designed using an interviewer-administered survey on the use of CAM for the treatment of COVID-19. A convenience sampling was conducted on COVID-19 positive patients who accessed medical care from the primary and tertiary care units of the Eastern Regional Health Authority (ERHA) for the year 2022. Data was collected on demography, comorbidities, types of CAM used, COVID-19 symptoms and attitude to vaccination. Data analysis conducted with Microsoft® Excel® version 2108 and SPSS® version 27.
Results: Of the 200 respondents, the majority (86.5%) used CAM and 72.1% were vaccinated against COVID-19. The commonly used types of CAM were ginger (66.7%) and garlic (45%) and plants (52.9%) such as moringa, neem and fever grass. Less commonly (< 2%) used herbs including cloves and cinnamon and aromatherapy steams involving a variation of oils such as peppermint, eucalyptus or shilling. More than half of the participants believed that CAM helped to prevent/improve their COVID-19 symptoms (56.9%), that CAM helped to shorten the duration of their viral symptoms (50.8 %) and that CAM aided in boosting their immune systems (67.3 %).
Conclusion: The majority of the study population trusted in the use of CAM as a form of treatment for symptoms of COVID-19 illness. Further investigations in to the efficacy of CAM and associated risks of their use and outcome are required.

O-36

Phytochemical screening and Antibacterial potential of Psidium guajava (Guava) leaf extract.

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Objective: To screen for the presence of phytochemicals and to determine the antibacterial potential of P. guajava leaf extracts.
Methods: Dried pulverised guava leaves were macerated using four solvents: hexane, ethyl acetate, methanol and 95% ethanol; and concentrated using a rotary evaporator. The crude extracts were screened for phytochemicals namely; saponins, alkaloids, tannins, flavonoids, phenols, steroids and terpenoids, according to standard testing procedures. Sterile filter paper discs were soaked in different concentrations of the various extracts. The Kirby Bauer disc diffusion method was done on Mueller Hinton agar seeded with bacteria. Discs were placed in triplicate on each plate. Discs soaked in pure solvent were used as the negative control. The positive controls used were ciprofloxacin, ceftazidime and tetracycline. After incubation, zones of inhibition around the discs were measured in millimeters and the results expressed as mean ± SD.
Results: All the phytochemical that we screened for were present the guava leaf extracts. Large zones of inhibition were seen with the ethyl acetate extracts especially at 100mg/ml for S. aureus (22.0±6.1mm), E.coli (16.3±0.9mm) and P. aeruginosa (15.0±0.0mm). Zones of inhibition were seen for the ethanolic abstracts especially at 100mg/ml for K pneumoniae (22.0±4.3mm) and P aeruginosa (14.0±1.0mm). Zones for the 100mg/ml extracts against S. aureus were larger than those for ceftazidime (19mm), while those of P. aeruginosa were larger than those for tetracycline (9mm).
Conclusion: P. guajava leaves contains many phytochemicals which in turn posses great antibacterial activity and therefore have great potential as a novel alternative to antibiotic treatment.

O-37

Can we use wastewater surveillance to detect patterns of antibiotic resistant in bacteria?

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Objective: The objective of this study was to determine the presence of antibiotic resistance in E. coli for selected antibiotics isolated from wastewater samples.
Methods: Composite wastewater samples (31) were collected between January 2022 and October 2023 via autosampler. E. coli was isolated from the samples using lactose fermentation, colony patterns in selective media, and indole, methyl red, Voges-Proskauer, and citrate (IMViC) test. Antibiotic susceptibility phenotypes of E. coli from 40 isolates were determined using the standard disk diffusion technique following the Clinical and Laboratory Standards Institute guidelines against 12 different antibiotics.
Results: Eleven (27.5%) of the 40 isolates examined showed resistance to at least one of the antibiotics tested, with 10% demonstrating multidrug resistance. Resistance to ampicillin at 15% was the most commonly resistant antibiotic recorded.
Conclusion: This is the first report on antibiotic E. coli resistance in wastewater in Grenada. Similar results were obtained for studies on wastewater on a small community in Georgia, USA, where ampicillin was also the dominant resistance antibiotic recorded. The results show that wastewater can be utilized as a surveillance tool to monitor the occurrence of antibiotic resistant bacteria and may play a critical role in the detection of potential public health threats like superbugs.

O-38

A knowledge, attitudes and practices survey amongst veterinarians in Barbados on antibiotic usage, resistance and antimicrobial stewardship.

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Objective: To identify the knowledge, attitudes and practices amongst veterinarians in Barbados regarding antibiotic usage, resistance and antimicrobial stewardship.
Methods: A cross-sectional study was performed in Barbados between February to June 2023, to identify the knowledge, attitudes, and practices of registered veterinarians in Barbados towards antibiotic prescribing, antibiotic resistance and antimicrobial stewardship using a pre-tested 69-point structured questionnaire distributed via SurveyMonkey. Veterinarians were contacted via email through the Barbados Veterinary Association. Survey questions were developed based on pre-existing questionnaires from surveys conducted in Australia and Nigeria respectively.
Results: 22/44 (50%) veterinarians responded with 8 males, 13 females and 1 undisclosed. Most respondents (88.9%) believed that Barbados has a serious problem with antimicrobial resistance. Only 26% of respondents were knowledgeable regarding antibiotic resistance and antimicrobial stewardship where >10 years of experience culminated in better knowledge. Knowledgeable veterinarians have better attitudes towards antibiotic use. Barriers to implementing antimicrobial stewardship practices included client pressure (72.2%), time constraints (68.9%), lack of awareness of antimicrobial stewardship (59.5%) and understanding antibiotics (50%). Antimicrobial treatment failure was noted by 86% of veterinarians with Staphylococcus spp (12) being the most common pathogen. There was a strong correlation between prescribing and antimicrobial susceptibility testing (r=0.85), especially among large animal veterinarians (r=0.92). Most (71%) respondents did not participate in continuing education sessions on antimicrobial resistance and stewardship over the last 3 years.
Conclusion: Increased education, support and resources are needed for veterinarians in Barbados to implement antimicrobial stewardship practices which will reduce the frequency of antimicrobial resistance in animals.

O-39

Sargassum Invasions and Their Impact on Caribbean Shorelines: Exploring Environmental Violence and Potential Effects on the Human Neurological System

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Objective: To investigate the potential effect of environmental exposure to H2S gas emitted by decomposing sargassum on the central regulation of breathing.
Methods: This single-center retrospective cohort study is set at the tertiary-care sleep center of the University Hospital of the French Caribbean Island of Martinique. The records of patients having programmed functional polysomnography explorations from 01/01/2018 to 31/12/2022 were retrospectively reviewed and socio-demographic data, medical history and polysomnographic characteristics were collected.
Results: 685 patients were considered (mean age: 55 ± 16 years, 60 % women). Frequent medical histories were systemic hypertension (50.9 %) and diabetes (11.8 %). Related sleep apnea symptoms were as follows: 67.5% nycturia, 24.5% dyspnea, 24% headache. A total of 186 patients (27%) were exposed to sargassum emissions. Compared

with non-exposed patients, exposed ones had similar sleep apnea syndrome risk factors, but had increased levels of central sleep apneic (CSA) events. Multivariate regression retained only male gender and mean H2S concentration over a 6-month exposure period as independent predictors of an increase in CSA events. A minimal exposure length of 1 month generated a significant rise in CSA events, with the latter increasing proportionally with a cumulative increase in H2S concentration over time.

Conclusion: This novel work adds to previous findings by our team describing, in exposed individuals, a symptomatologic presentation (general, respiratory, digestive, neurological, cardiological) suggestive of chronic exposure to average H2S doses <10 ppm, and a risk of early onset of preeclampsia in pregnant women living close (<2 km) to impacted coastlines. Jointly, these studies now constitute a body of evidence strongly supporting a deleterious effect of sargassum-H2S on the health of individuals chronically exposed to low to moderate concentration levels over time. Further multidisciplinary studies targeting the cognitive functions and brain structures of exposed subjects should be considered.

O-40
Determinants of Long-term Mortality in Barbados

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Objective: To investigate determinants of long-term mortality in Barbadian men and women comparing those with and without chronic diseases at baseline

Methods: The study combines data from the Health of the Nation study (2011–2013) with mortality statistics obtained from national records in December 2022. Logistic analyses were used to determine the association between multiple risk factors and all-cause mortality after more than a decade follow-up.

Results: Vital status data was available for 97.32% of participants, with the remaining 2.68% assumed alive. Of the 1233, 127 including 70 (9.2%) women and 57 (12.1%) men died during the 12 years of follow-up, with a mortality rate of 10.58%. Those who died were older, had higher levels of baseline systolic BP and HbA1c. Univariable analyses indicated that age [odd ratio (95% confidence intervals); 1.12 (1.10, 1.14)], hypertension [3.56 (2.4, 5.28)], stroke [3.05 (1.29, 6.64)], high cholesterol [2.68 (1.83, 3.94)], systolic blood pressure (per 1 mmHg) [1.03 (1.02, 1.03)] and HbA1C (%) [1.26 (1.14, were directly associated with mortality. In a multivariable model, hypertension [1.75 (1.05, 2.92)], and diabetes [1.68 (1.01, 2.78) independent of age (1.12 (1.10, 1.14, per year), sex [1.93 (1.20, 3.11), male) and level of education (tertiary vs primary: 0.55 (0.30, 0.99) were associated with increased risk of death. Education level attainment at the secondary vs primary and smoking were not associated with mortality in this model.

Conclusion: The findings here emphasise the importance of early, effective health interventions and policies on reducing levels of NCDs including hypertension and diabetes to mitigate against the significant burden of premature morbidity and mortality.

O-41
Substance Use Among Men who Have Sex with Men In Region 4 Guyana and its Effects on Risky Sexual Behavior

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Objective: Question:How is the epidemiology of recreational non-prescription drug use and its association with risky sexual behaviour manifested among Men who Have Sex with Men (MSM) in Guyana.

Goal: To understand substance use/abuse among MSM in the context of the most populated region in Guyana (Region 4), the reasons for such use and the underlying causes for such reasons.

Methods: The study is a cross sectional research that describes the prevalence and factors relating to substance use among MSMs in Region 4 and seeks to measure the association principally between drug use and risky sexually behaviour. Participants will all be 18 years old or older at the time of the survey. The data will be collected using questionnaires.

Results: From 117 respondents 52.2% were between the ages 18–25. 71% percent of all participants used marijuana, 22% used ecstasy and another 72% used alcohol.33% of the participants had sex with a partner known to be infected with HIV/non-HIV STI, while under the influence of a drug. 76.2% of all the respondents who used marijuana were between the ages of 18–30, 40.5% of this group were between 21–25 years old. 57.1% identified as Afro-Guyanese. 61.9% of those who consumed marijuana also consumed alcohol and 25.6% consumed ecstasy.

There is a significant association between marijuana use and number of male partners had in the last 12 months.Specifically, MSMs who used marijuana were 2.3 times more likely to have an annual number of 5 or more male partners (regular or casual). Also, there is an association between alcohol use and post-consumption unprotected sex (sex within 8 hours of consumption).

Conclusion: There is a need for specific interventions among MSM pertaining to drug uses, risk perception and reduction efforts. Psychosocial support would also be beneficial.

O-42

Evaluation of Risky Sexual Behavior and Associated Factors among University Students in Guyana: A Cross-Sectional Study

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Objective: The overall aim of the study is to assess the prevalence of sexual risk behavior, and its associated factors and explore some safe sex behaviors adopted by university students in both the private and public sectors in Guyana. To achieve this aim, the study has three main objectives as follows:

1 To evaluate the prevalence of risky sexual behaviors in university students.
2 To assess the expected risky sexual behavior and associated factors in university students.
3 To explore safe and secure preventative sexual measures adopted by university students.

Methods: The present cross-sectional study used an online survey among 340 university students at 12 tertiary institutions in Guyana. The survey included questions related to demographic information, Risky Sexual Behaviors (RSB), Adverse Childhood Experiences-International Questionnaire (ACE), and measures related to safe sexual behavior.
Results: A total of 340 students with a response rate of 88.31% participated in the study. 67.9% reported having had sexual intercourse. Risky sexual behaviors were prevalent, with males exhibiting higher tendencies. The common RSB included unprotected sex, regretful encounters, pornography, and masturbation addiction, influenced by factors like marijuana and alcohol use, sex toy engagement, age, gender, and adverse childhood experiences. A negative correlation was found between RSB and concerns about STIs, pregnancy, and encounters with unknown partners. Regarding safe sex practices, males demonstrated a higher degree of proactivity than females.
Conclusion: Understanding gender-specific patterns in safe sex practices is crucial for developing targeted strategies to bridge existing gaps and promote a culture of informed and responsible sexual behaviors among university students.

O-43

Implementation of a Multisectoral Programme to Improve Indigenous Adolescent Mental Health in Brazil and Dominica (IMPACT).

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Objective: To implement and evaluate a culturally adapted multi-sectoral program to improve Indigenous adolescent mental health (MH) in Brazil (Guarita Lands) and Dominica (Kalinago Territory).
Methods: About 1400 adolescents are expected to take part in IMPACT via their school and village activities in 2 components (i) Mental health promotion programme to improve awareness of maintaining good MH, preventing, and treating MH problems, and (ii) Mental health care programme, supported by trained Indigenous Community Health Workers, to identify and manage common adolescent MH problems. Trained Indigenous researchers will support evaluation over 3 years.
Results: IMPACT started in August 2023 and the following have been achieved: a detailed co-developed Logic Model and Theory of Change containing 4 work packages (WPs): WP1: Partnership building and co-development. Local Adolescent Indigenous Groups and Stakeholder Implementation groups (SIG) co-developed all aspects of the study. WP2: Training of Indigenous implementors in MH promotion and mental health Gap Action Programme (mhGAP). WP3: Programme evaluation will use a theory-generating case study methodology to facilitate theoretical generalisations for wide-scale implementation. WP4: Knowledge exchange and impact include a Youth Expert Group and a capacity building hub. . The Nnarratives centred around family, school, and community life, and will be developed using creative arts.. Role-paly for training and creative methods in MH Promotion and creative methods for the training of carers and communities on mh-GAP were felt to be critical.
Conclusion: Respectful and equitable coproduction processes with Indigenous adolescents and their communities are critical for a sustainable and culturally acceptable MH programme.

O-44

Reproductive health history and late life cognition in Tobagonian women

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Objective: Dementia prevalence is higher for women compared to men, with women of African ancestry being especially vulnerable. Emerging evidence suggests reproductive health may play a role in dementia risk, yet no data exists in the Caribbean region. We assessed the association of reproductive health with cognition in the Tobago Women Study.
Methods: Digit Symbol Substitution Test (DSST) and self-reported reproductive health data were obtained from 776 women aged 55.8+8.9 years in 2021–23, who reported having had at least one pregnancy. Multivariable regression models estimated the association between 5 indicators of reproductive health (age at first live birth, parity, pregnancy complications, age at menarche and menopause) and DSST score, adjusted for age and education level, and further adjusted for cardiometabolic conditions, due to their known association with DSST.
Results: Among 776 women, 43 did not have any live child birth, and the average parity was 2.83+2.4. A total of 172 of 776 (22%) women in this cohort had at least one pregnancy complication; five (5)% had pre-eclampsia, 2% had gestational diabetes and 16% had another, non-specified pregnancy complication. Age at first live birth was 22.6 (5.6), age at menarche and menopause were 12.7 (1.9) and 48.9 (5.8), respectively. Older age at first live birth was positively related with DSST (standardized beta: 0.145, $p<0.001$); this association remained independent of cardiometabolic conditions, parity and pregnancy complications. Conversely, parity, history of pregnancy complications, age at menarche or menopause were not associated with DSST after adjustment for cardiometabolic conditions.
Conclusion: In this population-based study of women of African ancestry, older age at the time of first live birth appears protective for cognitive function, independent of number of children or complications. Our results indicate potential novel strategies to protect women from dementia risk.

O-45
Hanging Suicide in Martinique

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Objective: This study aims to comprehensively elucidate the epidemiological, clinical, and therapeutic aspects of attempted suicide by hanging in Martinique.
Methods: This retrospective study involved a meticulous analysis of medical records pertaining to all individuals admitted to the intensive care units at the University Hospital of Martinique (UHM), Trinite Genral Hospital, and Lamentin General Hospital - over a nine-year period (2005–2014) following hanging incidents. Additionally, data from the pre-hospital emergency medical service (SAMU 972) were incorporated into the analysis.
Results: A total of 165 patients were admitted, comprising 139 men and 26 women, with a mean age of 44 years (ranging from 9 to 89 years). Notably, 5% of patients had significant pre-existing medical conditions. Analysis of predictive mortality parameters revealed the significance of prehospital cardiac arrest, Glasgow Coma Scale scores, mechanical ventilation, and convulsions.

Unfortunately, all patients with pre-hospital cardiac arrest (5%) succumbed to their injuries. Moreover, the mortality rate was high, with 75% of patients not surviving, with only 41 out of 165 patients being actively monitored during the study period. The average length of hospital stay was 3 ± 7 days.
Conclusion: Suicide represents a significant public health issue, particularly pronounced in the French West Indies. In Martinique, for instance, there is a notably high rate of suicide attempts by hanging, averaging approximately 32 cases annually within a population of 375,000. Outcomes for individuals who attempt suicide by hanging are often gravely serious, particularly if a pre-hospital cardiac arrest occurs. This underscores the critical need for immediate and comprehensive medical intervention.

O-46
The Impact of COVID-19 and Online Schooling on Medical Students' Academic Performance and Mental-Health.

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Objective: To assess and compare the impact of online-schooling on mental-health and its advantages and disadvantages on the academic-performance of medical-students across the year groups 2, 3 and 4.
Methods: A descriptive cross-sectional study using convenience sample of 255 medical-students attending the University of the West Indies, St. Augustine across year 2 through 4 was conducted. Data collection involved distribution of an online questionnaire to participants which assessed the impact on academic performance and mental-health of the

medical-students. Data analysis was done using IBM SPSS to record and analyse the findings.
Results: A total of 255 students completed the questionnaire. Females accounted for 57.6% of the sample, while 42.0% were male with a mean age of 23. Each year-group observed 33.3% participation for year 2, 3 and 4 respectively. Among respondents, 51% reported improved grades during online-school. Compared to in-person classes, 40% reported lowered stress levels and 44.71% of students indicated experiencing depression, during online-schooling. Overall, 47.7% of students suggested that online-schooling was more negative compared to in-person.
Conclusion: Most participants reported improved academic performance when schooling virtually, but this was associated with a significant decline in mental-health. Despite the improved academic standing, participants described the overall online-schooling experience as more negative compared to in-person. Supplemental face-to-face classes were suggested to improve the online-schooling experience.

O-47
Addressing the Determinants of Stress among Adolescent Students through PetOwnership

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Objective: To assess whether pet-owning students are less stressed than those who do not own pets.
Methods: A cross-sectional survey was conducted in high school across Grenada during January to June 2023. Data collected included demographic information of age (years) and gender (male, female). Academic attendance and performance was self-reported. Pet ownership was determined as having at least one pet at home that is cared for by the student self-perceived and stress was rated on a scale from 1 (lowest) to 10 (highest).
Results: 187 students completed the survey which included 87% female and mean age of 17 years. 95 (51%) students reported attendance between the 75th and 95% percentile and overall mean GPA of 3.1 (2.2, 3.7) was recorded. 73 (39%) of students, N=73, had at least one pet living with them. Lack of pet ownership was significantly associated with stress (p=0.02). However, it was not associated with gender, GPA, or class attendance (all p>0.10). Among students with any pets, 58% owned one or more dogs, and 41% owned one or more other animals. Within pet owners there was no association between stress and either species or number of pets (all p>0.5). Almost all (93%) of pet owners reported that their pet decreased their stress, while only one (1.5%) reported that the pet increased their stress.
Conclusion: Study is consistent with the protective effect of pets on stress in this population. There was however, a lower rate of pet acquisition among people with high stress levels.

O-48
Completed and attempted suicides, and methods used among adolescents in Trinidad and Tobago from 2013-2022.

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Objective: To identify rates of and methods used in completed and attempted suicides among adolescents in cases recorded by the Trinidad and Tobago Police Service (TTPS) Crime and Problem Analysis (CAPA) Unit from January 2013 to April 2022.
Methods: Secondary data on completed and attempted suicide were obtained from the CAPA unit. Methods used in suicide were categorised using the ICD 11 "external causes of morbidity or mortality- self-harm category.
Results: Records yielded 178 cases (age 10 to 19 years, 51.4% male), comprising 37% (N=65) completed and 63% (N=113) attempted suicides. An 85% increase in cases of attempted suicides was observed during the pandemic (2020–2022 vs 2013–2019). Males were significantly more likely to complete suicide (OR=2.126, 95% CI [1.374, 3.290]), and less likely to attempt suicide (OR=0.659, 95% CI [0.521,0.832]) than females. Among completed suicides, methods used were "threat to breathing" (80%) (e.g., hanging), and "exposure to non- medicinal substances", (20%) (e.g., weedicides, pesticides, solvents). Among attempted suicides, the most common methods were "exposure to non-medicinal substances" (59%), "threat to breathing" (15%), and "exposure to drugs/medicaments" (14%). "Threat to breathing" was 15 times more likely to be reported in completed than attempted suicides when compared to "exposure to non-medicinal substances" (OR=15, 95% CI[6.67, 33.71].
Conclusion: Similar to adults, completed suicides in adolescents were associated with male sex and more lethal methods. Suicide prevention interventions should target sex, include public education campaigns to raise awareness, limit access to substances more commonly used, and mitigate the negative impact of the pandemic.


UNIVERSAL HEALTH COVERAGE
ADDITIONAL SERVICES TO MATERNAL AND CHILD HEALTH SERVICES
AT NO COST
Laboratory Services
Ultrasound Services
PERIOD OF JUNE TO DECEMBER 2023
1302 ULTRASOUNDS WERE DONE
1463 PREGNANT WOMEN RECEIVED ROUTINE LABORATORIES
1014 NEW REGISTERED EXPECTANT MOTHERS
MINISTRY OF HEALTH
SAINT LUCIA

Poster Abstracts

P-01

The Saving Brains Grenada/Conscious Discipline Programme: A Pre-primary and Primary School-Based Violence-Prevention Program for Children and Adults

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Objective: To disseminate brain-based, trauma-informed alternative discipline methods aimed at improving neurodevelopment by teaching social-emotional, self-regulation, and conflict management skills to prevent school and home violence, including corporal punishment and child maltreatment.
Methods: Since 2015, 5,692 children, 2,828 families, and 250 teachers in 93 private and public schools across Grenada, West Indies have received Conscious Discipline (CD) coaching and materials. The primary outcome is child neurodevelopment, including social-emotional development, which is being assessed among 400 children in intervention schools by comparing them to children in wait-list control schools. Classroom environment and teacher variables have also been assessed, including teacher mental health, programme fidelity, attitudes towards corporal punishment, and teachers' perceived emotional safety.
Results: Qualitative data indicate healthier classroom environments and reduced incidents of conflict and problematic student behaviour, as well as improved teacher and pupil satisfaction with the intervention programme as alternative discipline and self-discipline skills are internalized and practiced. In addition to an overview of the programme and its rationale based in brain development and evidence-based pedagogy, we will present quantitative outcome data as of April 2024.
Conclusion: A plethora of evidence demonstrates that physical discipline is inconducive to healthy brain development and learning. The Saving Brains Grenada/Conscious Discipline programme fosters nonviolent homes and classrooms and skillful behaviour management, thereby providing environments conducive to improved social and academic outcomes. Despite this being an ongoing intervention in Grenada, the theme of the conference prompts submission and sharing of background, methods, and anecdotal results.

P-02

Birth Rates in East Trinidad during the Covid-19 Pandemic

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Objective: To assess the birth rates in East Trinidad during the COVID-19 pandemic.
Methods: Retrospective cohort study was performed. Study population was persons living in East Trinidad 2018–2022, All pregnancies, live births and stillbirths were included. Miscarriages and intrauterine fetal demise were excluded. Data was collected from 16 primary care health centers in counties St. Andrews/St. David and Nariva/Mayaro and one tertiary care unit, the Sangre Grande Hospital (SGH) in East Trinidad, from January 2018 to December 2022. The following variables were collected and analyzed in Microsoft® Excel® version 27: the yearly birth rate in East Trinidad, the rate of teenage pregnancies, and the number of Caesarean sections, stillbirths and antenatal clinic attendances.
Results: In East Trinidad 2018–2022, a 5–10% decrease in birth rate per 1000 was observed per annum (19.0 for 2018, 18.1 for 2019, 16.2 for 2020, 15.0 for 2021, 13.4 for 2022) representing a 29.5% decline overall in the 5year period. For the 5year period, an overall decline was observed for the following variables: the rate of teenage pregnancy (32.0, 31.2, 27.7, 25.6, 18.4), the number of Caesarean sections performed (478, 485, 469, 401, 346), the number of first visits to antenatal clinic at both primary care (1455, 1521, 1287, 1281, 1274) and tertiary care (710, 655, 602, 517, 510). Return visits to tertiary care was also reduced from 2018 (n=5056) to 2021 (n=2484). The number of stillbirths was low over the 5 year period (from 8 to 3).

Conclusion: For the period 2018–2022, there has been a decline in the annual birth rates in East Trinidad. Further research is necessary to determine the causal factors of such decline including the role of the Covid-19 pandemic on fertility and the long term sequelae on population health.

P-03

Maternal and perinatal outcomes associated with elective induction of labor at full term versus induction at late term pregnancies at Georgetown Public Hospital Corporation from January 2019 to January 2022.

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Objective: To evaluate the mode of delivery in patients electively induced at full term versus induction at late term pregnancy. To evaluate the 5 minute Apgar score of the neonate in both groups. To describe the mode of delivery in primigravidas and multigravidas induced electively versus late term induction.
Methods: This was a retrospective analytic study. The sample included data collected from patients electively induced at full term and those induced at late term pregnancy from 1st January 2019 to 1st January 2021 (N= 365). Statistical analyses comparing cases and controls was performed.
Results: Caesarean section (CS) rate was found to be 16.9% (N=11) in the electively induced group and 28.0% (N=84) in the late term pregnancy (LTP) group. In multigravida women, the rate of CS was 20% (N=40) in LTP, and 13% (N=6) in the electively induced cohort. In the primigravidas group, the rate of CS was 44% (N=44) in the LTP cohort, and 28% (N=5) in the early induction cohort. Neonates born to mothers in the electively induced group had no Apgar score of less than 7 but 1.3% (N=6) had Apgar in the late term group.
Conclusion: Inductions done at late term had higher rate of caesarean (1 in 6 patients) compared to the elective group (1 in 4 patients). Primigravidas delivering by caesarean were almost doubled when induced at late-term pregnancy, and elective induction was associated with favourable outcomes in Apgar scores.

P-04

An Evaluation of the Lipid Profile and Hematology Profile in Down Syndrome Children & Adolescents in Guyana- a pilot study

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Objective: To compare the mean values of lipid and hematology profile in children and adolescents with Down syndrome to the established local reference range.
Methods: Children and adolescents clinically diagnosed with Down syndrome (DS) between the ages of 4 and 18 years were enrolled for the study based on the inclusion criteria. Mindray automated haematological analyzer and Envoy 500+ automated biochemical analyzer was used. Mean ± Standard Deviation (Mean±SD) was used for representing the data. A t-test was done to compare the lipid profile values with the defined local reference ranges.
Results: All participants were included in the study. The Mean±SD values obtained for total cholesterol, triglycerides, and VLDL were 152.7mg/dL ± 39.3mg/dL (p=0.2), 78.7mg/dL ± 30.1mg/dL (p=0.1), and 15.8mg/dL ± 6.1mg/dL (p=0.002) respectively. The Mean±SD were recorded for White Blood Cell Count (WBC), Haemoglobin (Hb), haematocrit, Red Blood Cell Count (RBC), and platelet count were 5.9 ± 2.4L (p=0.09), 13.0 ± 1.4g/dL (p=0.06), 41.9 ± 4.2% (p=0.9), 4.6 ± 0.6L (p=0.4), and 266.6 ± 81.8L (p=0.3) respectively. Only mean values of MCHC, MPV and Triglycerides values were below the reference values.

All participants were included in the study. The Mean ± SD values obtained for total cholesterol, triglycerides, and VLDL were 152.7mg/dL ± 39.3mg/dL (p=0.2), 78.7mg/dL ± 30.1mg/dL (p=0.1), and 15.8mg/dL ± 6.1mg/dL (p=0.002) respectively. Minimum and maximum total cholesterol, triglycerides and VLDL were 121–235mg/dL; 37–114mg/dL; 11–23mg/dL respectively.
Conclusion: Although the mean values of VLDL were statistically significant, the values reported for total cholesterol and triglycerides do not deviate statistically from the established values. To find conclusive differences, large sample size must be included for testing.

P-05

Satisfaction of caregivers with the services provided at the Pediatrics Outpatient Department at the Georgetown Public Hospital Cooperation

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Objective: To evaluate caregivers' level of satisfaction with the services provided by the pediatrics outpatient department of the Georgetown Public Hospital Corporation between January and February 2023
Methods: This is a descriptive qualitative study that took place between January 24th to February 27th, 2023 at the

Paediatric Outpatient Department, using a tested questionnaire. A total of 331 caregivers whose patients were between the ages of 1 month and 13 years participated and data was analyzed using Microsoft excel

Results: 278 out of 331 caregivers representing 84% of the total study population, reported either a good, very good or excellent perception of the overall quality of care in the department. A total of 249 or 75% agreed that their patient's treatment was discussed adequately with them, in comparison with only 20 or 6%. There were 293 caregivers or 86% who were satisfied with the Nurses overall attitudes. Of the caregivers, 25% were not satisfied with the environment of the waiting area of the Clinic.

Conclusion: It can be stated that there was an overall satisfaction of the 84% of caregivers that visited the Paediatric Outpatient Department from January 24th to February 27th, 2023.

P-06

"Respectful Maternity Care (RMC) Formative Assessment – A Case Study of Trinidad and Tobago"

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Objective: To conduct a formative assessment of RMC in the public and private sectors from the perspectives of healthcare professionals and clients.

Methods: A mixed methods approach was used. Quantitative data were collected from pregnant women (297) and midwives/Obstetricians (175). Qualitative data were collected from pregnant women, spouses, care providers, and policymakers as key informant interviews (37) and focus group discussions (6). Quantitative data were analyzed using descriptive analysis and qualitative data were analyzed using thematic analysis.

Results: Most women were 26–35 years, had secondary school education, Christian, married/cohabited, professional, had>2 children, and spent >48 hours on the ward. Women generally reported being treated with respect, were made comfortable but less reported having access to sufficient equipment/supplies, space, and staffing. Less than 50% reported having a labor or birth companion. Few women reported being spoken to in a rude or humiliating way, having their information discussed publicly, or being threatened to cooperate or their childbirth experience will be affected. Men believed that providers spoke less sensitively to them while women who were younger or older felt judged or discriminated against as a result of their age or number of children.

Conclusion: Both providers, women, and their partners share an understanding of disrespectful/respectful care. Although severe mistreatment is rare, the findings from the study can be used as a framework for developing recommendations to enhance RMC services in the public and private sector

P-07

The Impact of the Covid-19 Pandemic on Child Growth in Guyana

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Objective: To compare the pre-pandemic growth data of the children ages 0-5 to their pandemic growth rate at Dorothy Bailey Health Centre, Georgetown, Guyana.

Methods: This quantitative, cross-sectional study was conducted using the growth parameters i.e., Z scores (weight for age, weight for length/height and length/height for age) between the pre-pandemic period March 2019-March 2020 and pandemic period March 2021 to March 2022. Growth data was collected from the well-child clinic charts and questionnaires were distributed to parents of children between the ages of 0-5 years at the Dorothy Bailey Centre to deduce impactful social issues. P values derived from the paired t-test estimated the association between the Z scores and the parameters checked. P-value<0.05= statistical significance.

Results: A total of 181 subjects were included in the study from chart data retrieval and 55 subjects for the questionnaire portion of the study. The weight for age (p= 0.024) and weight for length/height (p=0.000) Z scores increased from that of the pre-pandemic period to the pandemic period. However, there was a decrease in the length for age Z score (p= 0.001). Additionally, the social effects of the pandemic identified were decreased household income, children eating more than usual, playing less than usual and sleeping more than usual in some cases. Another finding was that the general health status of the children generally remained unchanged.

Conclusion: This study found statistically significant increase in the Z scores in weight for age and weight for length/height but a decrease in length/height for age Z score in the pandemic year when compared to the pre-pandemic year. In relation to the social effects of the COVID-19 pandemic on families of the children aged 0-5, the most notable was a decrease in household income. Other effects include increased eating, decreased physical activity and increased sleep.

P-08

A Scoping Review of the Prevalence and Associated Factors of Early Discontinuation Rate of Contraceptive Implants

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Objective: To synthesize and analyze existing knowledge to identify reasons for early implant discontinuation, examining prevalent factors, regional disparities, and their impact on women's health and family planning and to inform evidence-based policies and healthcare practices surrounding women's contraceptive choices.
Methods: Utilizing Arksey and O'Malley's framework (2005), a systematic approach was employed that encompasses five stages. A comprehensive review question guided the search strategy, identifying pertinent studies focusing on early intradermal implant removal. A modified PICO framework was used to determine the inclusion criteria and 10 public health databases were searched to collect articles published between January 2018 and August 2023. A meticulous screening process was conducted in two stages, resulting in the inclusion of six research papers that met the criteria. Data extracted from these studies were then organized in a chart.
Results: Findings from the selected studies highlighted similarities and variations in factors driving early contraceptive implant removal across diverse geographical regions (Thailand, Ethiopia, Uganda, and South Africa). Consistently reported side effects like headaches, weight fluctuations, and menstrual irregularities were primary reasons for early discontinuation. Inadequate counseling, lack of follow-up sessions, and dissatisfaction with services also contributed to higher removal rates. Cultural nuances were evident, with distinct focus areas such as fertility intentions in Thailand, side effects in Ethiopia and Uganda, and counseling importance in South Africa.
Conclusion: The identified factors underscore the need for targeted interventions and policy adaptations to address early implant removal rates effectively. Tailored counseling services acknowledging diverse cultural beliefs, robust post-insertion follow-ups, and improved service quality emerged as pivotal strategies. Culturally sensitive healthcare practices accommodating regional variations in family planning perspectives are crucial to enhance contraceptive continuity and women's reproductive health outcomes. Further, adolescent reproductive education was recommended for informed contraceptive use and addressing early removal concerns.

P-09

Sexual practices, Hygiene and Associated Risk Factors for Urinary Tract Infections among Pregnant Women at the Linden Hospital Complex, Guyana.

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Objective: To determine the associated risk factors for urinary tract infections among pregnant women.
Methods: The study is a cross- sectional design, that surveyed 39 pregnant women with urinary tract infection admitted at the linden hospital complex between June 1, 2019 to July 15, 2019. Information regarding sexual practices, hygiene and associated risk factors were collected via questionnaires. Data was entered into excel and Statistical analysis was done using the Statistical Package for Social Sciences (SPSS).
Results: Sexually active pregnant women who have sexual intercourse more than once per week are at an elevated risk for UTIs (48.7%) compared to those who have sex one time a month (20%). Pregnant women who have oral sex and masturbate with saliva were found to have 28.2% and 15.4% respectively. One third of the pregnant women infected with UTIs practice douching of which 69% of them use water while 31% use commercial feminine washes. Pregnant women who wipe from back to front or in both directions after a bowel account for 46.2% of the cases of UTI. More than 80% of the UTI cases mostly wear synthetic underwear.
Conclusion: The findings were consistent with other studies. It is recommended that modified health promotion strategies be implemented nationwide to adequately educate pregnant women about the associated risk factors and prevention mechanisms to minimise the risk of urinary tract infection and its potential complication to both mother and unborn child.

P-10

Securing Health Information: A Study of Patient Privacy in Guyana's HIV Care and Treatment Facilities

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Objective:

- To Examine existing procedures regarding patient privacy, confidentiality, and patient health information

security in selected healthcare facilities while Assessing Training Components on privacy and confidentiality.
- To Capture the perspectives of healthcare staff and patients on issues related to patient privacy, confidentiality, and personal health information (PHI) handling while documenting gaps or challenges in the current framework of patient privacy, confidentiality, and PHI security.
- To investigate how HIV stigma may influence breaches in patient confidentiality and affect the overall patient privacy environment.

Methods: Utilizing a mixed-methods approach, this study assessed patient privacy, confidentiality, and PHI security in Guyana's healthcare facilities. Five diverse facilities were selected, involving healthcare staff and patients. Quantitative data on training evaluations and privacy perceptions were gathered through surveys, while qualitative insights were obtained via interviews and focus group discussions. Ethical considerations were observed, and data were analyzed statistically and thematically. The study acknowledges limitations, including potential bias and constraints in sample size, and emphasizes the importance of these findings for informing healthcare policies.

Results: The study's findings, based on interviews, group work sessions, and feedback from 179 participants, reveal significant challenges to patient privacy and confidentiality in healthcare settings. Patients and healthcare staff identified issues related to the physical layout of treatment sites, process-related problems, patient records, and staff behaviour. Notably, the lack of private spaces, the labeling and visibility of HIV-related services, and the absence of standardization in patient forms were identified as areas needing improvement.

Conclusion: In conclusion, this study's findings highlight critical challenges in patient privacy and confidentiality and offer a comprehensive set of recommendations to address these issues. Implementing these recommendations will contribute to a more respectful and secure healthcare environment for all patients, regardless of their health conditions.

P-11

Microbial Analysis of Indoor Air Quality and the Effectiveness of a Disinfection Intervention at a University Library.

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Objective: To determine the microbial load of the air in the main library at the University of Guyana and to evaluate the effectiveness of a disinfection intervention on the microbial load of the air.

Methods: This was an experimental based study involving three phases of analyzing the microbial quality of the air, a disinfection experiment and a disinfection intervention. Phase 1 was done prior to rehabilitation of the library, phase 2 was done during the rehabilitation and phase 3 was carried out after the rehabilitation and a disinfection intervention. Samples were collected using the settle plate method and incubated according to standard laboratory procedures. Colony forming units (CFUs) were enumerated and the microbial load was determined via the Omeliansky equation. Several disinfectants were tested against two bacteria and the most effective ones were selected to design a specific disinfection protocol for use by the library cleaners.

Results: The bacterial load for phase 1 (13,114 CFU/m^3) and phase 2 (7,636 CFU/m^3) was higher than that of phase 3 (4,648 CFU/m^3). The bacterial load between the three levels ranged between 2,739- 6,640 CFU/m^3 for phase 1, 1,992- 3,486 CFU/m^3 for phase 2 and 1,411- 1,743 CFU/m^3 for phase 3. Although a limited number of settle plates were used to determine the fungal load, a high fungal load (4,067 CFU/m^3) was noted before the disinfection intervention but no growth after.

Conclusion: We concluded that a high microbial load was found in our study prior to the disinfection intervention which was considerably diminished after the intervention. We recommend that the cleaning regimen we developed, be implemented as part of the library's cleaning protocol.

P-12

Primary care physicians' perceptions of pre-exposure prophylaxis (PrEP) for HIV in Guyana: a qualitative study

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Objective: To explore primary care physicians' knowledge and opinions of PrEP.

Methods: The qualitative, phenomenological approach couched in the interpretivist paradigm was used. Ethical approval and informed consent were obtained. Purposive sampling was used to achieve a heterogeneous group of physicians from publicly funded clinics in Region 4. In-person interviews lasting 25–45 minutes were conducted using a piloted, semi-structured guide. These interviews were audio recorded and transcribed verbatim, and themes were developed following a hybrid of inductive and deductive coding. Saturation occurred at the 13th participant.

Results: Eleven females and two males representing varying years of experience and specialization participated. The four themes developed were: 1) physicians' experiences; 2) physicians' clinical competence; 3) opinions of and concerns about PrEP; 4) perceived facilitators of and barriers to prescription. All the participants knew what PrEP was used for and viewed it as a necessary intervention. Concerns about the safety of the drug, patients' adherence, drug resistance, increased incidence of sexually transmitted infections, and diversion of the drug from the HIV program to facilitate PrEP prescription were expressed. Continuous medical education was perceived as a facilitator while unavailability of the drug and limited support staff were identified as potential barriers.
Conclusion: Primary care physicians knew what PrEP was used for, were able to identify who should use it, and believed it was necessary to reduce HIV incidence. Targeted educational programs should be developed to improve their clinical competence, increase confidence in the safety of the drug, and address their concerns so they can confidently prescribe PrEP.

P-13

Early detection and response: The importance of rapid syndromic diagnostics in the control of communicable disease in UK Caribbean territories.

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Objective: Many of the UK overseas territories are small with limited microbiological diagnostic capacity for pathogens and antimicrobial resistance detection. The Covid-19 pandemic highlighted the particular vulnerability of these territories for the emergence of novel infections and antimicrobial resistance. The UKHSA program with its territory partners implemented rapid syndromic molecular diagnostics aiming to improve the speed of diagnosis for patient management and public health detection and response.
Methods: Diagnostic capacity was enhanced with the local implementation of closed molecular systems (Biofire, GeneXpert). Local laboratory staff were trained in the use of the diagnostics, and guidance was provided to clinicians. Syndromic diagnoses included were enteric, respiratory, bloodstream, neurological infection, sexually transmitted disease, HPV and tuberculosis, and antibiotic resistance mechanisms.
Results: Each territory now has access to syndromic diagnostic platforms. Rapid detection has enabled early diagnosis to support timely patient management, infection prevention and early public health intervention and reporting. The diagnostic range and speed has been significantly enhanced.

This presentation will describe clinical vignettes where these innovations have delivered significant improvement to healthcare.
Conclusion: Previously undiagnosed conditions, can now be identified rapidly in territory, allowing appropriate clinical management, infection prevention, improved antimicrobial stewardship and rapid public health response. This technology is simple to operate and maintain with little scope for user error. The work continues to develop territory early diagnostic methods in antimicrobial resistance, global fever conditions and vector borne disease to strengthen local preparedness in communicable disease and public health response, backed up by regional reference facilities (CARPHA).

P-14

Bloodstream infections among patients admitted to the department of internalmedicine, Georgetown Public Hospital Corporation.

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Objective: To determine the incidence of bloodstream infections in patients admitted to the internal medicine department, GPHC over a one-year period, and to identify the common organisms isolated from blood cultures, their antimicrobial susceptibility patterns as well as the admitting diagnoses and comorbidities of these patients.
Methods: A retrospective cross-sectional analysis of 180 positive blood culture isolates received over a one-year period was done. Pertinent data were collected from the blood culture logbook at the microbiology section, GPHC laboratory and patient charts from the medical records department. Incidence was calculated and the IBM SPSS analytical software was utilized for data analysis and identifying statistically significant relationships.
Results: The incidence of bloodstream infections was 2.2%. Enterococcus sp. (GPC) was found to be the most common microorganism isolated (12.5%), while Pseudomonas sp. (GNB) and MRSA (GPC) accounted for 11.9% and 10.4% respectively. Many positive cultures demonstrated multi-drug resistance (MDR) to aminoglycosides (8.5% to 11.7%), penicillins (13.2% to 14.9%) and cephalosporins (8.5% to 20.2%). Admitting diagnoses included community acquired pneumonia, urosepsis, catheter related blood stream infection among others. Diabetes Mellitus (28%) and hypertension (27%) were the 2 most common comorbidities. Chronic kidney disease was present in 13% cases, while 8% of patients had no comorbidities.

Conclusion: Findings demonstrate multi-drug resistance amongst commonly identified isolates and show that patients with comorbidities have a higher risk to develop bacteremia. As a response to these challenges, implementation of robust infection control practices and an antibiotic stewardship program should be of priority at GPHC.

P-15

Evaluation of management in women with Atypical Squamous Cell of Unknown Significance (ASC-US) smear and High risk papillomavirus positive test in Martinique

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Objective: According to the French guidelines, it is necessary to carry out a colposcopy in women with an ASC-US Pap smear and a positive HR-HPV test. The objectives of this study was, firstly, to evaluate the follow-up of women with ASC-US/HR-HPV positive smear in comparison to the recommendations and secondly to determine the reasons for any follow-up defects.
Methods: Women aged 25 to 65 yearsseen at the Gynaecology department of the Martinique University Hospital, fromJanuary 1, 2018 to December 31, 2019 and having an ASC-US smear and a positive HR-HPV were included retrospectively. Specimens for cervical cytology were collected via ThinPrep™ Pap Test. The screening of HR-HPV were carried out using the PAPILLOCHECK™ kit. The study obtained a favorable opinion from the Institutional Review Board and the patients were informed orally. "Compliant follow-up" was defined as a colposcopy performed within 3 months after the positive ASC-US/HR-HPV smear, "Delayed follow-up" when the colposcopy was performed over 3 months and "Lost for follow-up" when no colposcopy was performed.
Results: On the 114 women included, 64.9% underwent a colposcopy with a delay of 4.1 ± 4.2 months. Compliant follow-up was found for 45.1% of patients, 16.6% experienced a delayed follow-up and 35% were lost to follow-up. The main reasons cited by the women for postponed or lacking colposcopy were a long delay in making an appointment with a gynecologist, a complex care circuit and a lack of understanding the management of the disease and his benefits.
Conclusion: The study revealed suboptimal follow-up for ASC-US smear/HR-HPV positive women. To decrease the incidence of cervical cancer in Martinique, it is necessary to improve patient's compliance with follow-up. Better communication between patient and caregiver, reduced appointments waiting time to coloposcopy and a simplified care circuit are essential.

P-16

Factors Influencing Non-Compliance of Anti-Retroviral Treatment in Patients with HIV at the National Care and Treatment Centre.

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Objective: To identify various factors affecting the non-adherence of individuals with human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS) to their antiretroviral treatment.
Methods: The study took place over an eight-week period at the National Care and Treatment Center. Patients at the clinic were given a 39-question questionnaire to complete. The data were statistically analyzed using SPSS 27.0.
Results: The largest group of the participants were ≥50 years old (32%), and females (55%), with secondary education (55%). Approximately 4 out of 5 participants indicated favorable adherence to their prescribed regimen (77%). About 49.6% of participants in total strongly agreed that they are treated with respect by healthcare professionals. A little over 61.9% of respondents said they were happy with the health care they received, and 61.6% said they felt respected.
Conclusion: Patient's non-adherence to ART varies over time and between people. Male gender, patients under 40 years, unemployed or illiterate, and those who have only been receiving ART for a short period of time (between 3-6 months) showed greater rates of treatment noncompliance. Following an HIV positive test, people in these groups experienced a lack of social support, withdraw within themselves, and had little understanding of the advantages of ART adherence.

P-17

The impact of COVID-19 on imaging case volumes at Georgetown Public Hospital Corporation, Radiology Department, Guyana.

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Objective: To investigate the impact of the COVID-19 pandemic on imaging case volumes in the radiology department at Georgetown Public Hospital Corporation (GPHC), Guyana.
Methods: The total number of imaging examinations conducted at GPHC's imaging department for two 6-month periods (1st April to 30th September, 2019 and 1st April to 30th September, 2021) was retrospectively collected and compared. The overall percent change in imaging case

volume, 2021 versus 2019, and percent change based on imaging modality and examination type were calculated.
Results: A total of 29,240 imaging examinations were done during the period April 01 to September 30, 2021 compared to 46,856 during similar period in 2019. This corresponded to a decrease in imaging case volume by 37% in 2021 relative to 2019. Decrease in case volumes were observed for general X-ray (-47.5%) followed by fluoroscopy (-48.4%), while CT (39.6%) and ultrasound (40.5%) recorded increases in 2021, relative to 2019. Fluoroscopy recorded the greatest decline for all the imaging modalities (-48.4%). For general X-ray, chest examinations recorded the greatest decline (-80.2%), for CT; upper limbs (-63.2%), fluoroscopy; IVP_IVU (-92.8%), whilst for ultrasound only prostate examinations recorded a decrease (-2.6%).
Conclusion: There was a notable overall decline in imaging case volumes due to the COVID-19 pandemic. The changes varied by imaging modality and examination type, with some experiencing substantial declines while others saw considerable increases. This underscores the need for healthcare institutions to remain adaptable and responsive to optimize service delivery during public health crises.

P-18
The impact of Coronavirus Disease 2019 on staff at a tertiary referral hospital in Guyana

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Objective: 1. To determine how staff at Georgetown Public Hospital Corporation (GPHC) were affected by the Coronavirus Disease 2019 (COVID-19) pandemic.
2. To determine the staff's satisfaction with the hospital's response to the COVID-19 pandemic.
Methods: This cross-sectional study used a Qualtrics survey tool to collect relevant data from current GPHC staff over a six week period from November to December 2021. Data regarding staff demographics, employment characteristics, individual experiences related to COVID-19, their degree of wellness and satisfaction with the hospital's response to COVID-19 was obtained. Correlations were sought between the self-reported prevalence of COVID-19 among staff and the data collected. Statistical analyses were conducted using IBM Statistical Package for the Social Sciences (SPSS) Version 27 and p-values <0.05 were considered statistically significant.
Results: The prevalence of COVID-19 among GPHC's Health Care Workers (HCWs) was 35.3%. Physicians had a significantly lower prevalence of COVID-19 (29.3%, $p < 0.05$) whereas nurses had a higher prevalence (44.8%, $p < 0.05$). The Accident and Emergency (A&E) department had a significantly higher rate of COVID-19 infection compared to other departments (51.9%, $p < 0.001$). COVID-19 positivity was higher among respondents who received a vaccine after a vaccination mandate was nationally instituted vs prior ($p < 0.001$). Mean wellness and workplace satisfaction scores were 2.72/4 and 2.61/4 respectively. Nurses and doctors had the lowest wellness and satisfaction scores.
Conclusion: Our study suggests that COVID-19 had a significant impact on GPHC's staff individual experiences and degree of wellness. Risk factors for burnout were highlighted by the wellness statements, while the satisfaction statements indicated areas for improvement. Our data can be used for targeted initiatives that enhance future pandemic preparedness at GPHC.

P-19
Knowledge, Acceptance and attitudes of parents regarding COVID-19 vaccination of children at the Georgetown Public Hospital Corporation and its Satellite Health Centers.

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Objective: To assess the general attitude of parents towards COVID-19 vaccination of children and identify possible linkages to aid in establishing means to combat negative attitudes toward COVID-19 Vaccination.
Methods: Parents and legal guardians of children aged 6 months to twelve years were included in the target sample which totaled 386 participants. The Georgetown Public Hospital Corporation and its satellite health centers were chosen as research sites. Participants were interviewed using an interviewer-administered The demographic, and other characteristics among these participants were compared, and SPSS was used to assess the statistical significance of difference across groups.
Results: Results indicated a 77% vaccination rate among participating parents, with the main reason for vaccination being to maintain job security (47%). Among the unvaccinated participants, 51% influenced by social media and 23% by personal research. However, a child vaccination rate of only 14% was seen. Results also showed a significant relationship between the age of the parents and opinion on COVID-19 vaccine safety in children (p-value .002), scientific background and vaccine safety opinions (p-value < .001), ethnicity and vaccine safety opinions (p-value <.003), level of education and vaccine safety opinions (p-value < .001). Source of knowledge about COVID-19 vaccines also showed significance in the opinion if its safety in children (p <.001).

Conclusion: Several factors, including age, scientific background, ethnicity, highest level of education, and source of information were found to be associated with participants' views on the safety of COVID-19 vaccines in children. Understanding these diverse factors can guide more targeted efforts that resonate with specific demographic considerations, promoting an effective public health approach.

P-20

The Clinical Course of Covid 19 in the Paediatric Population at Georgetown Public Hospital and Infectious Disease Hospital: A Retrospective Chart Review.

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Objective: To examine the clinical progression of Covid 19 positive paediatric patients who required admission at GPHC and to the IDH based on demographics, signs and symptoms at presentation, clinical course during admission and to highlight pertinent laboratory findings.
Methods: This study was a retrospective chart analysis of a cohort of Covid 19 paediatric patients aged zero (0) to twelve (12) years admitted between August 2020–August 2022 at GPHC and IDH. Ninety-five (95) charts were used and a data collection sheet was used to gather the necessary data. Analysis was then done using SPSS version 26.
Results: 95 charts were reviewed and showed a predominance of males (64.2%) and patients of African descent (35.8%). The largest age-group of children admitted were under 1 year (20%). Chief complaints were fever and vomiting; 26% and 18% respectively. On admission only 16 patients (9%) had a fever. Most patients had normal WBC (59.5%), and infiltrates were common on chest x rays (68%). Most patients 82 (86%) did not have any complications during their hospitalization. There were 4 (4.2%) deaths. Underlying medical conditions did not have any effects of admission duration (p=0.424) nor on developing complications (p=0.098).
Conclusion: Children appear to have a milder disease course regardless of having an underlying medical condition. Fever and vomiting were the most common presenting complaints, hence there should still be a high level of suspicion when patients present even without respiratory symptoms.

P-21

Trends in Transfusion-Transmissible Infections Among Blood Donors between 2018–2022 at the National Blood Transfusion Service, Guyana

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Objective: To investigate the prevalence of transfusion-transmitted infections among blood donors in Guyana.
Methods: This study is a retrospective, cross-sectional study analysed data from blood donors at the National Blood Transfusion Centre, Georgetown, Guyana from the years 2018–2022. The blood donations were screened for HBV, HCV, HIV, HTLV, Syphilis and Chagas disease. Statistical analysis was done using SPSS v. 26. with the chi square test being used with p-value < 0.05 = statistical significance.
Results: A total of 45,535 (M 17,757; F 27,778) blood donations were recorded for the study period. This study found 3,184 of seropositive cases of transfusion-transmissible infections (TTIs) were documented over the 5-year period. The overall prevalence of TTIs during this 5-year period was 7.0%. Furthermore, the study found that the HBV (1.5%) had the highest prevalence, then HCV (1.4%) then Chagas (1.2%), Syphilis (1.0%), HIV (0.9%), HTLV (0.8%). The study also found that males had higher seropositive rates for all TTI markers and that the prevalence decreased as age increased.
Conclusion:
This study shows a high prevalence of HBV, HCV, Chagas, HIV, Syphilis and HTLV cases among blood donors in Guyana. This increase may indicate a similar trend in the general Guyanese population and there needs to be an active campaign to raise awareness of these diseases and promote screening, prevention and treatment of these. Additionally, TTIs were predominantly recorded in the youthful population and more studies are needed to unearth the reason for this. Finally, screening should be done on a country-wide scale to prevent the complications of these infections before they become major public health crises.

P-22

Mental Health Assessment of Key Populations Living with HIV (PLHIV) in Guyana

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Objective:

- To assess participants' perception of Mental Health and Psychosocial Support Services about the availability and accessibility for MSM HIV communities.

- To identify the most common mental health challenges faced by the MSM HIV population in Guyana and the support needed.

Methods: A purposive sampling strategy was employed for the Human Immunodeficiency Virus (HIV) infected Men who have sex with Men (MSM) population, in which the researcher relies on accessibility, availability, and willingness when choosing members of this population to participate in the study. The participatory assessment was focused mainly on four Administrative Regions of Guyana using qualitative methodology in Focus group discussions (FGD) and questionnaires.

Results: Mental Health and Psychosocial Well-being: Cultural factors significantly influence mental health within the community, with some individuals facing stigmatization and discrimination, leading to social withdrawal and distress.

Support Networks: While many participants highlighted the crucial support from friends and family, some hesitated to share mental health struggles due to fear of discrimination.

Changes in Social Life: Respondents reported varied impacts on social life, including increased withdrawal or reduced participation in recreational activities, with a minority experiencing heightened socialization.

Participation in Cultural Activities: The majority did not actively engage in community cultural activities, citing reasons such as personal preferences, stigma, and discrimination.

Desire for Improvement: Respondents expressed a collective desire for positive change, emphasizing the need for more job opportunities, counseling services, and recreational activities to foster supportive and safe community environments promoting mental health.

Conclusion: This study highlights the intricate relationship between cultural beliefs, customs, and mental health within a diverse community. While there is evidence of support networks and resilience, there are also challenges posed by stigmatization and discrimination. The findings underscore the importance of tailored interventions to address these issues.

P-23

The Effects of Fluoxetine on Anxiety-Like Behaviours of Zebrafish (Danio-rerio)

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Objective: To assess whether fluoxetine can cause an observable anxiety-reducing behavioural change on zebrafish.

Methods: A total of 16 zebrafish were used in this study: half were treated with fluoxetine and the other half were untreated. Both groups of zebrafish underwent a startle cue test to evoke stress responses. The average proportion of time spent in the top half of the tank and the average number of erratic movements during each time interval were assessed.

Results: The difference between the average proportion of time spent in the top half of the tank was significantly different between the fluoxetine and control groups ($t(22) = 2.074$, $p < 0.05$). Differences were observed in the average number of erratic movements in the startle cue test for the fluoxetine, $F(2,11) = 3.98$, $p = 0.005$ and control groups, $F(2,11) = 3.98$, $p = 0.001$.

Conclusion: Fluoxetine was shown to exert behavioural effects on treated zebrafish, most likely attributable to the anxiolytic effect of fluoxetine on the stress induced state of the tested animals.

P-24

Factors associated with readmission to the Psychiatric Holding at the Georgetown Public Hospital Corporation in Guyana

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Objective: To identify patient related factors associated with readmission to the Psychiatric Holding at the Georgetown Public Hospital Corporation.

Methods: This was a retrospective study. The sample consisted of patients admitted to the Psychiatric Holding in 2020 and 2021. Data was collected from patients admitted once and those admitted more than once. Statistical analysis was done using a simple log-binomial regression.

Results: The readmission rate was 20%. Within the readmission group 7.9% were married, 21% were employed, 15% had social support, 14% had no history of substance use, 65% had a history of violence, 21% had a diagnosis of a substance use disorder, and compliance with medication and clinic follow up were 5% and 10% respectively. Within the group with single admissions 9.6% were married (p-value < 0.001), 88% employed (RR 1.71 p-value = 0.049), 85% had social support (RR 2.15 p - value = 0.001), 86% had a history of no substance use (RR 1.77 p-value = 0.008), 41% had no history of violence (RR 2.17 p-value = 0.001), 6% had a substance use disorder (RR 2.66 p-value= 0.001), and compliance with medication and clinic follow up were 95% (RR 5.75) and 90% (RR 2.60)respectively (p-value = 0.001).

Conclusion: The readmission rate was 20%. Patients readmitted were less likely to be married and more likely to be unemployed, lack social support, have a history of substance

use and violence, have a diagnosis of a substance use disorder, and be non- compliant with medication and clinic visits.

P-25

Factors associated with depression among adult patients attending the Psychiatric Outpatient clinic at Georgetown Public Hospital Corporation from December 2021 to December 2022.

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Objective: To determine the prevalence and factors associated with depression among adult patients attending the psychiatric outpatient clinic at Georgetown Public Hospital Corporation.
Methods: This is a retrospective observational study The population included the total number of adult new patients attending the Psychiatry outpatient clinic from December 2021 to December 2022 (n=650). Patients diagnosed with depression during the study period were included in the sample (n=211). Variables were collected. A basic log-binomial regression model was used for statistical analysis.
Results: The prevalence of depression was 32.5%. The most common demographic groups were females (77.3%), single (56.9%) and primary based education with an average of 50.7%. The logistic regression analysis revealed a significant relationship between gender and depression (χ^2 = 100.864, df = 1, p < .001). The other variables that were significant related to depression were previous history of suicidal attempts (Odds ratio 7.442, p < .000) , family history mood disorder (Odds ratio 2.515, p > .001 and history of substance use (Odds ratio 0.578 , p > 0.578).
Conclusion: The findings suggest that females with a history of mood disorders, and people with previous suicidal attempts were significantly related to a diagnosis of depression.

P-26

Mothering as a social determinant of mental health: Cultural dynamics and insights from professional Black West Indian women in the British Virgin Islands

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Objective: this study investigates how cultural dynamics associated with West Indian mothering influence the psychological well-being of Professional Black West Indian Women (PBWIW) in the British Virgin Islands.
Methods: Employing a phenomenological qualitative research design, this study utilized focus groups to collect data from a sample (N=21) of PBWIW. Interpretive Phenomenological Analysis and Discursive Psychology Discourse analysis informed the data collection and analysis to explore how participants interpreted and internalized maternal desires and the influence on psychological wellbeing.
Results: Participants emphasized the transmission of maternal desires as protective and risk factors toward psychological wellbeing. Maternal desires transmitted as obligations were experienced as risk factors, whereas desires transmitted as expectations were experienced as protective factors. These findings suggest a significant influence of mothering on the psychological well-being of Professional Black West Indian Women (PBWIW) in the British Virgin Islands (BVI).
Conclusion: The findings of this study support an adaptation of existing mental health service delivery frameworks to promote information about mothering and other family relationships as social determinants influencing mental health and wellbeing at the community level.
Mental Health

P-27

Exploring the Relationship between Sex, Sleep Patterns, and Psychological Distress among College of Medical Science Students at the University of Guyana

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Objective: To investigate the associations between sex, sleep patterns, and psychological distress among College of Medical Science students at the University of Guyana
Methods: This cross-sectional study employed a convenient sampling technique to recruit participants from the College of Medical Sciences. Demographic information (age, sex, residence) was collected. Participants provided consent before responding to a questionnaire, which included an assessment using a modified Warwick-Edinburgh Mental Well-Being Scale.
Results: The study found a significant association between mental health status, and the sex of health science students (X^2 = 11.782, df = 1, p < 0.001). Female students were three

times more likely to experience psychological distress than males (OR: 9.2488, 95% CI: 5.2587 to 16.2665, Z statistic 7.722, P < 0.0001). The modified Warwick-Edinburgh mental health well-being scores exhibited normal distribution (W=0.993, df: 289, p=0.175). A T-test revealed a significant sex-based difference in mean scores for psychological distress (t (3.331), df = 287, P < 0.001), with a small to medium effect size (d=0.464, 95% CI: 1.1 to 4.2).

A significant association was identified between mental well-being and sleep-patterns (X^2 = 23.453, df = 1, P < 0.001, 95% CI). Students experiencing sleep-disturbance due to worry were three times more likely to experience psychological distress (OR: 3.3, 95% CI: 2.0055 - 5.2947, Z statistic: 4.770, P < 0.0001). An independent samples T-test demonstrated a significant difference in mean scores for sleep-disturbance, with a medium to large effect size (d=0.64, 95% CI: 4.9 to 2.3).

Conclusion: Findings between mental health status and the sex of health science students, highlight the importance of gender-sensitive mental-health interventions in academic settings. The results regarding sleep-patterns and psychological distress align with existing literature, offering valuable insights into the intricate relationship between sleep and mental-health in academia.

P-28

Sociodemographic Descriptive Analysis and Navigating the Nexus: Mental Health Among College of Medical Science Students at the University of Guyana

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Objective: This study aimed to explore the associations between sociodemographic variables, student worries, and mental health outcomes in the College of Medical Sciences.

Methods: This cross-sectional study employed convenience sampling, ensuring participants' legal eligibility and consent. Google Forms were used to distribute the questionnaire which included the Warwick-Edinburgh Mental Well-Being Scale and GHQ-12 and covered demographic data (age, residence, and sex).

Results: The modified GHQ-12 scores exhibited a non-normal distribution based on the Shapiro-Wilk's test (W=0.986, df: 289, p=0.006). A Kruskal-Wallis H test indicated a statistically significant difference in mean scores among three psychological distress groups; H (2) = Chi-Squared statistic adjusted for 217.868, p<0.001. Pearson's Chi-squared test revealed a significant association between mental-health status (GHQ-12 groups) and worry due to studies (X^2 = 44.435, df=2, p<0.001). Students worrying about University Studies were four times more likely to have severe psychological-distress (OR: 4.1053, 95% CI: 2.2191 to 7.5948, z statistic: 4.500, P < 0.0001).

The Warwick-Edinburgh mental-health and well-being scores were normally distributed (W=0.993, df: 289, p=0.175), and an independent samples T-test showed a significant difference in the mean scores for those reporting interference with daily-living activities due to worry, with a large effect-size (d=0.838) and a 95% confidence interval for the difference of the means ranging from 3.3 to 5.87.

There was a significant association between mental-health status and interference with Daily Living Activities and University Studies (X^2 = 26.497, df=1, p<0.001). Those reporting interference were four times more likely to experience psychological-distress (OR: 3.6517, 95% CI: 2.207-6.042, Z statistic: 5.041, P < 0.0001). A Chi-squared test identified a significant association between mental-health status and Student requests for support from Academic staff (X^2 = 9.760, df=1, p<0.002).

Conclusion: The findings underscore the connections between mental-health, academic challenges, and seeking support, aligning with existing research and contributing to a deeper understanding of influences on mental well-being i on academia.

P-29

Workplace stress conditions and its impact on the Health care delivery at the New Amsterdam Hospital during the covid-19 pandemic between April-December 2020: A retrospective study of Health Care Workers

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Objective: 1. To identify stressors healthcare workers experienced during the pandemic

2. To examine how these stressors experienced by the health care workers affected their effectiveness at work.

Methods: This retrospective study was conducted using a questionnaire that was administered using Google forms and involved 189 healthcare workers. The questionnaire sought to address participants' demographic information, working conditions and operations, personal experiences,

challenges and concerns encountered while working during the COVID-19 Pandemic.

Results: There was a 94.2% response rate to the questionnaires that were distributed and the results revealed that (79%) of respondents were females and the majority of respondents (53.9%) were within the 25–34 years' age group. Of the total number of respondents, 74% were nurses and the majority (34.9%) worked between 3-4 years at the hospital. I. Healthcare workers reported an increased level of stress and other challenges, that were based on inadequate working conditions, inadequate financial compensation, staff being over worked and inadequate support provided by the Ministry of Health.

Conclusion: Healthcare workers at the NA Hospital experienced increased levels of stress on the job and this affected their overall job performance during the COVID-19 pandemic. They felt they were not properly equipped to deal with the increased level of stress and did not get adequate guidance and support from their supervisors.

P-30

Characterization of Suicidal behaviour among patients 10 to 17 years old who attended the Georgetown Public Hospital Corporation Psychiatry clinic from 1st January 2022 to 31st December 2022

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Objective: Objective: To describe Suicidal behaviour among patients 10 to 17 years old attending the Georgetown Public Hospital Corporation Psychiatry clinic from January 1st, 2022, to December 31st, 2022.

Methods: A cross-sectional study of 60 patients was done. The demographic and socioeconomic data from patient charts were recorded in an excel file and then read into R Core Team (2022). The information was presented using tables/charts along with descriptive summaries. Fisher's exact test was used for associations between two variables and the Prevalence was also calculated.

Results: The Prevalence of Suicidal behaviour was 21%. Demographic factors identified female patients with an average age of 14.5 years. The largest group of patients were Indo-Guyanese (49.2%) from Region 4. Christians represented 58.3% of the patients. Mothers (38.3%) were commonly the legal representatives. Most patients had no medical (85.1%) or psychiatric history (60%) and did not use substances (81.4%). Ingestion of substances (69.4%) was the most common method of suicide attempt. The patients with suicidal behaviour were above the age of 14 years (58%) and attended school (75%). Individuals of African (90%) descent were Christians and Indian descent (59%) were Hindus. The religious affiliation between individuals of these races was significant (p-value=0.001). Other associations were not statistically significant.

Conclusion: The findings provided valuable insights into the characteristics and prevalence of suicidal behavior within this specific age group from our clinic setting. There is a need l for more detailed epidemiological studies that will help to inform targeted interventions, raise awareness, and develop more effective strategies to prevent and address suicidal tendencies among adolescents in Guyana.

P-31

Caregiver Burden in Mental Illness

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Objective: To explore and examine the impact of mental illness among family members of newly admitted patients to GPHC Psychiatry Clinic from January 2021 to December 2021.

Methods: Cross sectional study done at GPHC from January 2021 to December 2021, consisting of 140 family caregivers of newly admitted patients to the adult psychiatry clinic, using a convenience sampling method. Data collection tools used were Brief Coping Scale & Pai & Kapoor Family Burden Interview. Bivariate analysis (t test, analysis of variance and Pearson correlation) were performed and variables with values of $p < 0.05$ were considered significant.

Results: For the caregivers, 72.9% were between the age group of 31–50 years, 65% were females, 47.1% Afro-Guyanese, 45.7% were not receiving help with caregiving & 45.7% worked for minimum wage. For the patients 62.1% were males, 59.3% were 18 to 30 years, 47.1% were Afro-Guyanese, 63.6% without partner & 45.7% had Substance/ Medication-Induced Psychotic Disorder. Highest domains of burden & their mean scores included financial burden 1.93(0.24), effect on mental health of others 1.72 ± 0.65, disruption of family routine 1.63 ± 0.62 & family interaction 1.25 ± 0.57 & Most employed coping mechanisms among caregivers were religion 2.0 ± 0.00, venting 1.99 ± 0.08 & denial 1.95 ± 0.20.

Conclusion: This study attempted to shed some light on the immense strain caregivers of the mentally ill face. The most prevalent areas of burden included financial, disruption of family routine and effect on mental health of others. Lower areas of burden were observed in family leisure and physical health of others. It was also highlighted that a significant number of caregivers employ unhealthy coping mechanisms, particularly within the avoidance category, with the exception of religion, to offset their burden.

P-32

Knowledge Attitude and Practices Towards Chronic Kidney Disease Among Healthcare Professionals, Training Healthcare Professionals and Patients in The North Central Regional Health Authority of Trinidad and Tobago

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Objective: To assess the knowledge, attitudes, and practices (KAP) towards Chronic Kidney Disease (CKD) among healthcare practitioners and patients within the North-Central Regional Health Authority (NCRHA), aiming to identify gaps for shaping future healthcare initiatives.
Methods: A cross-sectional study was conducted from January to June 2023, encompassing all NCRHA affiliated hospitals. The study population included healthcare workers and adult patients, using a non-probability purposive sampling method. A comprehensive questionnaire assessed KAP related to CKD.
Results: Among 163 respondents, 50.6% demonstrated good knowledge, and 66.1% displayed positive attitudes towards CKD. Regarding practices, 54.3% demonstrated good CKD-related practices. Variations in mean KAP scores were observed across different demographic groups, highlighting their statistical significance.
Conclusion: The study emphasizes the need for targeted health education initiatives, addressing identified knowledge gaps and encouraging healthier attitudes and practices towards CKD. The impact of educational level on KAP scores suggests that special focus should be given to educational strategies in Trinidad for effective CKD prevention and management.

P-33

A Comparative Study on Conventional Screening Methods and Citrate Haemoglobin Electrophoresis on Sickle Cell Patients in Guyana

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Objective: To identify the accurate and low-cost method(s) in the diagnosis of Sickle Cell Disease in Guyana.
Methods: A descriptive laboratory-based study with 50 samples collected and analyzed using the Hooks method, Sodium Metabisulphite, and solubility tests. Haemoglobin electrophoresis (cellulose acetate) was used as the gold standard.
Results: A higher percentage of participants were Afro-Guyanese (58.0%; 95% CI 43.2-71.8) and female (62.0%; 95% CI 47.2-75.3) gender. Hematological parameters showed mean±SD of Hb 11.3±2.3 with no significant difference between males and females. Hooks method, SMB sickling test, and solubility tests showed an overall accuracy of 50.0% (95% CI 35.5-64.5), 72.0% (95% CI 57.5-83.3), 98% (95% CI 89.4-100.0) respectively. Hooks, Sodium Metabisulphite sickling and solubility tests had sensitivities of 30.3% (95% CI 15.6-48.7), 87.9% (95% CI 71.8-96.6), 97.0% (95% CI 84.2-99.9) respectively. Hooks, Sodium Metabisulphite sickling, solubility had specificities of 88.2% (95% CI 63.3-98.5), 41.2% (95% CI 18.4-67.1), 100.0% (95%CI 80.5-100.0) respectively. The study also found 20°C more efficient than 28oC in identifying positive cases with Hooks whereas in the sickling test, 0.2 grams of metabisulfite identified more positive cases compared to 0.56 grams. Cohen's kappa for Hooks, sickling, and solubility was 0.14 (95% CI -0.05-0.3), 0.3 (95% CI 0.05-0.6) and 0.96 (95% CI 0.7-1.2) respectively.
Conclusion: The solubility test was more reliable and accurate to perform than the sickling test and Hooks method. It would therefore be a recommended test for preliminary screening for SCD at laboratories and hospitals in Guyana.

P-34

Haemodialysis vs. peritoneal dialysis: a quality of life assessment study in Guyana

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Objective: To determine whether quality of life (QoL) differs between adult patients receiving haemodialysis (HD) and those receiving peritoneal dialysis (PD).
Methods: This cross-sectional, quantitative study surveyed a total of 100 patients in Region 4, Guyana from January 2014 to October, 2022. Primary data was collected using the KDQoL-36 questionnaire. The KDQoL-36 scoring program was used to generate QoL scores, means and SD. Data collected were analysed using SPSS v. 26. The independent t-T-est was used to determine statistical differences in QoL scores among gender and age. ANOVA was used to assess statistically significance between income and QoL, while simple linear regression was used to determine any significant relationship between age and QoL, and years on dialysis and QoL. CI =95%, p-value < 0.05 = statistical significance.
Results: Of the surveyed patients, the mean age was 52 years, while the mean time on dialysis was 2.38 years. Among the respondents 65% were from the low-income bracket but there was no statistical significance between QoL and income. Similarly, there was no statistical signifi-

cance between gender, age and QoL. The study found that HD and PD patients had average QoL. However, HD had a better physical composite QOL score when compared with PD patients. Furthermore, this study found that statistical significance differences exists between duration and frequency of dialysis and QoL, that is, patients that were on dialysis longer had fewer symptoms or problems listed.
Conclusion: Though the QoL was average for both haemodialysis and peritoneal dialysis patients, haemodialysis patients had a better QoL physical composite score than peritoneal dialysis patients. Additionally, patients who have been on dialysis longer and more frequently have had less problems noted. Finally, the sample size may be too small to discover statistical significance between demographic characteristics and dialysis modalities and a larger study is recommended.

P-35

A quantitative retrospective audit of the clinical spectrum and prevalence of paediatric renal diseases seen within the paediatric nephrology department at Georgetown Public Hospital Corporation during the time period of January, 2014 to April, 2023

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Objective: To analyze the different types of kidney diseases encountered at the Paediatric Nephrology Clinic at Georgetown Public Hospital Corporation (GPHC) during the time period of January 2014 to April 2023.
Methods: This study was a quantitative retrospective epidemiologic research based on the clinic charts of patients of the Nephrology Paediatric Clinic from January, 2014 to April 2023 at the GPHC. Information was obtained from the clinic charts of the paediatric nephrology clinic and entered in a secured SPSS spreadsheet.
Results: A total of 87 patients charts were obtained with 66% males, 34% females, and age distribution in decreasing percentage was as follows: 6–8yr (35.6%), 9–11yr (32.2%), 3–5yr (11.5%), 12–14yr (10.3%), 0–2yr (9.2%). The diagnoses recorded were nephrotic syndrome 63.2%, hydronephrosis was 10.3%. Other diagnoses included nephritic syndrome (4.6%), post-streptococcal glomerulonephritis (4.6%), posterior urethral valves (2.3%), acute kidney injury (2.3%), vesicoureteral reflux (2.3%), nephritis (2.3%), polycystic kidney disease (2.3%), chronic kidney disease (1.1%), glomerulonephritis (1.1%), end stage renal disease (1.1%) and renal agenesis (1.1%). Underweight children comprised 64.4% of the sample, healthy weight were 17.2%. Obesity and overweight were the least prevalent at 6.9% and 4.6% respectively.
Conclusion: Nephrotic syndrome was the most prevalent renal diagnosis paediatric patients. The relevance of this data described is contributing to the existing limited literature. It serves as useful data for awareness and outcomes of renal disorders in our Guyanese Paediatric population.

P-36

The knowledge, perception and practice of women towards cervical cancer screening who attended the Obstetrics and Gynaecology Clinic of the New Amsterdam Regional Hospital over a three months period.

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Objective: To assess patients knowledge of cervical cancer screening and to determine the factors that prevent it.
Methods: This study used a descriptive - qualitative design and was conducted at the Obstetrics and Gynaecology Clinic of the New Amsterdam Hospital between May and July 2023. The researcher administered a structured questionnaire.
Results: There were 428 participants. 37.3% (n= 149) of the participants had heard about cervical cancer screening but only 26.2% (n=112) had been screened. The main motivation for screening was due to the health awareness activity 43.3% (n=185) and recommendation from doctors 28.8% (n = 123). Of those screened, 70% stated that they were screened once while 18% were screened twice. Interestingly, 26.3% (n=112) believe that screening was not necessary if there were no signs or symptoms and that screening leads to infertility 53.6 (n= 229). The major perceived barrier to effective cervical cancer screening was fear of results 38.4% (n=164)
Conclusion: There is poor knowledge and practice regarding cervical cancer screening among Guyanese women. The World Health Organization implemented a global strategy to screen 70% of women between the ages of 35 to 45 by 2030. To achieve this, greater emphasis must be placed an health promotion geared at clearing misconceptions associated with screening and educating the population about the need for effective screening.

P-37

Making progress on noncommunicable diseases by tackling mental health stigma in small island communities - the British Virgin Islands and Bermuda

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Objective: To assess the feasibility of adapting and implementing an evidence-based methodology to tackle mental health stigma in small island communities, and to research the extent, impact and drivers of stigma to inform implementation
Methods: Anti-stigma interventions in the BVI and Bermuda were based on core methods of an evidence-based anti-stigma programme (Time to Change) implemented in England then adapted to local contents and cultures by mental health teams from the BVIHSA, Bermuda Hospitals Board and Bermuda Ministry of Health. Core methods included; foundational research (surveys of people with mental health problems on the extent/impact of stigma and 'audience insight' focus groups with local populations), training 'Champions' with mental health problems to share their stories at 'social contact' events, and social marketing campaigns.
Results: Core methods were adaptable to BVI and Bermuda contexts, but differences were noted in the numbers who felt able to speak publicly as Champions. There are seven active Champions in the BVI but, despite 85 people being approached and five completing initial training in Bermuda, there aren't any active Champions. The BVI's 'Mindful' campaign had impressive levels of reach (approximately193,000 impressions) and active engagement with material 25,000 times (August-December 2023). The best performing social media adverts featured the Champions. Forty-one people in the BVI and 74 people in Bermuda with mental health problems completed the stigma survey. Approximately forty-four per cent (43.9%) (BVI) and 43% (Bermuda) of respondents reported that stigma had stopped them from doing things in their communities; with families and communities being the most common cause of the perceived stigma in BVI and Bermuda respectively.
Conclusion: It is feasible to locally-tailor and successfully implement an existing evidence-based anti-stigma method and tools to meet the specific needs, culture, and context of small island communities. However, before any models are considered an initial assessment of the potential for adaption and revised approaches should be undertaken.

P-38

The incidence of lower limb amputations in type two diabetic patients at the Georgetown Public Hospital Corporation

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Objective: To determine the incidence of lower limb amputations in type two diabetic patients at the Georgetown Public Hospital Corporation from June 2021 to June 2023, a well as to determine the most common contributory factor to lower limb amputations.
Methods: This research employed a retrospective study approach and secondary data was collected from the diabetic patients' chart to determine whether a lower limb amputation was conducted from June 2021 to June 2023 in the General Surgery department of the Georgetown Public Hospital Corporation. Age, gender, the presence of comorbidities, smoking history, gangrene, osteomyelitis were the variables recorded in the diabetic lower limb amputees. This data was then analyzed using Microsoft Excel 2019 and Statistical Package for Social Sciences version 22 software.
Results: There was a total of 1242 patients, males- 41.2%, females- 58.8% with type two diabetes. Of these there was a total of 123 (9.9%) patients, males- 55.3%, females- 44.7% who underwent lower limb amputations with majority having below knee amputations (98%).The most common contributing factors identified were being 56 years and older (73%), hypertension (61%) and the presence of a diabetic foot ulcer (63.6%).
Conclusion: While women made up a greater proportion of the diabetic patients, men were more likely to have a lower limb amputation with below knee amputations being the most common. Additionally, age of 56 years and greater, hypertension and the presence of a diabetic foot ulcer proved to be the most significant risk factors.

P-39

In-person vs online delivery of a nutrition education intervention for improving nutrition knowledge and attitudes of amateur adolescent basketballers in eastern Trinidad

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Objective: To evaluate the effectiveness of an in-person and online nutrition education intervention to increase nutrition knowledge and attitudes of amateur adolescent basketball athletes in Eastern Trinidad.
Methods: A single case intervention study of 69 New Chapter Global Sport Academy adolescent athletes, aged 10–19 years completed a self-administered nutrition knowledge and attitudes multiple choice questionnaire in-person and online. The nutrition education intervention consisted of two modules, which were conducted in-person (Intervention 1 - Nutrition Basics) and online via Zoom (Intervention 2 - Supplementation, Sports Drinks and Label Reading. The

nutrition education intervention gain scores (post-test - pre-test) were calculated and analysed using ANOVA.
Results: The online intervention was more effective at improving participant nutrition knowledge and attitude, with a 21.57 ± 11.48 mean change between pre and post-test scores compared to in-person interventions which had a mean change of 8.18 ± 10.33. In-person nutrition education had significantly more learner engagement and had a 93.10% participant completion rate compared to 61.76% completion in online Intervention 2. The output of the dependent or paired t-test indicates for Intervention 1 (Mean Pre-test = 68.18 ± 12.03, Mean Post-test = 76.36 ± 10.62, Average difference = 8.18 p =< 0.01), and for Intervention 2 (Mean Pre-test = 66.67 ± 11.48, Mean Post-test = 88.24 ± 10.19, Average difference = 21.56 p =< 0.01). Hence, the mean paired difference between pre and post-test scores in Intervention 1 and 2 does not equal zero.
Conclusion: Overall, online interventions are more effective at improving overall nutrition knowledge and attitude scores of adolescent basketball players compared to in-person interventions which produce greater learner engagement and participation.

P-40
24-Hour Dietary Recall Nutrition Survey in St. Kitts and Nevis

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Objective: To assess individual food consumption patterns, energy and nutrient intakes in the adult population aged (18 to 65 years old) using the 24-Hour Dietary Recall (24-HDR) method.
Methods: A 24-Hour Dietary Recall Nutrition Survey and demographic characteristics were assessed through home visits conducted between February and March 2023. Nutrient intake was calculated using an Automated Self-Administered 24-hour dietary recall system.
Results: A total of 213 residents were included in the study, with 19% identified as overweight and 58.3% as obese. After considering the important covariates, the risk of lower fruit consumption significantly increased with age (aOR= 1.03; 95% CI = 1.00–1.06). Compared with people who were married, those who were single were more likely to have lower fruit consumption (aOR = 2.15; 95% CI = 1.01–4.57). Additionally, those engaging in physical activity 3~4 times/week were less likely to have lower fruit consumption (aOR = 0.35; 95% CI = 0.13–0.94) than those without a physical activity habit. Unexpectedly, the daily calorie intake was below the Pan American Health Organization's (PAHO) recommended levels whereas nearly 60% of subjects were obese. Furthermore, the median sodium intake of 2,915mg surpasses the World Health Organization's (WHO) recommended levels, while the potassium intake of 2,044mg falls below the WHO's recommended levels.
Conclusion: This study highlights the residents' intake of excessive sodium and insufficient potassium in St Kitts and Nevis and stresses the importance of interventions aimed at improving the dietary pattern, which may prevent chronic diseases, especially hypertension and cardiovascular diseases.

P-41
Guyana's Approach to Evidence-Based Public Health Practices at the Ministry of Health- A Cross Sectional Study

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Objective: This study aims to evaluate Guyana's approach to evidence-based public health practices within the MoH and identify areas for improvement.
Methods: A cross-sectional study design was employed. A questionnaire-based survey was administered to professionals working within the MoH to gather information on the integration of evidence-based practices, data collection and analysis methods, access to research and evidence, training programs, and challenges faced. Descriptive statistics were used to analyze the data.
Results: Preliminary findings indicate that while there is a recognition of evidence-based practices within the MoH, there are challenges related to limited access to research and evidence, inconsistent data collection methods, and the need for enhanced training programs. The study also identified a willingness among professionals to strengthen evidence-based practices and highlighted the importance of collaboration and capacity building.
Conclusion: The findings emphasize the importance of prioritizing evidence-based practices within the MoH in Guyana. Enhancing access to research and evidence, standardizing data collection methods, and developing robust training programs can contribute to strengthening evidence-based decision-making and program implementation.

P-42
Overcoming Barriers to Health Tourism Development in Guyana: A Comprehensive Study

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Objective:
- To identify the primary obstacles hindering the development of health tourism in Guyana.
- To recommend strategies for overcoming these barriers and fostering the growth of health tourism.

Methods: This research employs a qualitative systematic review to identify barriers and propose strategies for developing health tourism in Guyana. Through meticulous processes such as critical appraisal and thematic analysis, obstacles like limited infrastructure, regulatory constraints, and workforce shortages were identified. Proposed strategies include infrastructure enhancement, regulatory streamlining, and stakeholder collaboration. Despite limitations in sample size and potential bias, the study suggests a comprehensive approach to overcome identified barriers and promote health tourism in Guyana

Results: Infrastructure Elements: Inadequate healthcare infrastructure, transportation, and accessibility pose significant challenges. The government and private sector initiatives, such as the development of specialty hospitals and modern healthcare facilities, show promise in addressing these infrastructure limitations.

Legal and Governmental Variables (Inter-sectoral): Guyana's political stability, regulatory framework, and economic climate significantly impact health tourism. Collaborative efforts, policy reforms, and streamlined regulations are crucial to attracting internal and external investments. Health System-Related Elements (Intra-sectoral): Challenges in recruiting and retaining skilled healthcare professionals, language barriers, and human resource management are recognized obstacles. Addressing these issues requires investments in education, training, and attractive incentives for healthcare workers.

Conclusion: This study highlights the multifaceted barriers to health tourism development in Guyana and underscores the importance of collaboration among stakeholders, policy reforms, infrastructure development, and investment in human resources. Overcoming these barriers will not only enhance the nation's healthcare system but also position Guyana as a desirable destination for health tourists.

P-43

Analysis of Animal Research Regulations within Developing Caribbean Countries

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Objective: To analyze animal care and use policies for research within the Organization of Eastern Caribbean States and determine if differences exist in comparison to international standards to make recommendations to improve animal welfare within the region.

Methods: The study was conducted via a systematic literature review from March 2022 to 2023. All data was retrieved from online published sources using search engines such as PubMed, Google Scholar, University Libraries, and official governmental and organizational websites.

Results: Of the seven full member states of the Organization of Eastern Caribbean States, animal research could only be found within St. Kitts and Nevis (52.9%), Grenada (29%), Dominica (14%), and Antigua and Barbuda (2.9%). While general care and use protections exist in all seven countries, only three countries, Grenada, Montserrat, St. Kitts, and Nevis, were found to contain guides specific to animal use in research. Comparison with international policies highlighted limited incorporation of ethical principles and reduced regulatory oversight within the Organization of Eastern Caribbean States regulations.

Conclusion: Animal legislation exists within the Organization of Eastern Caribbean States. Most are limited to cruelty prevention with little emphasis on research. The differences between the OECS and international policies signal the need for a collaborative approach to legislative amendment and sensitization on animal care and use in research. There is also a need for the digitalization of records and education to assist in the spread of information and improvement of animal welfare within the region.

P-44

Knowledge, perception, and behaviour of hand hygiene among clinical year medical students at Greenheart Medical University (GMU) and Rajiv Gandhi University of Science and Technology (RGUST) in Guyana

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Objective: To assess the knowledge of hand hygiene among clinical-year medical students.

Methods: The research employs a cross-sectional design, focusing on clinical medical students at Greenheart Medical University and Rajiv Gandhi University. It utilizes a convenience sample encompassing all clinical-year students, prioritizing their consent and ensuring anonymity. The study was conducted online via links being sent through WhatsApp or email. Two validated questionnaires, adapted from previous studies, assess attitudes and practices of hand hygiene, while a WHO-developed questionnaire gauges knowledge. This approach aims to comprehensively under-

stand hand hygiene perspectives among medical students, contributing valuable insights to the broader field.

Results: A total of 50 students (n=50/52) participated in the questionnaire with a response rate of 96.2%. Overall, the level of knowledge was found to be moderate while attitude and practices of hand hygiene among clinical year medical students at GMU and RGUST were found to be good.

Conclusion: Clinical-year medical students at Greenheart Medical University and Rajiv Gandhi University of Science and Technology in Guyana display moderate knowledge of hand hygiene, but gaps exist in understanding germ transmission and common sources of healthcare-associated infections. Positive attitudes towards hand hygiene coexist with challenges like time constraints. Although hand hygiene practices generally align with guidelines, occasional non-adherence occurs. To improve, recommendations include strengthening formal training, continuous education, promoting role modeling, implementing monitoring mechanisms, and addressing attitudinal barriers. These measures aim to ensure future healthcare professionals prioritize hand hygiene, reducing healthcare-associated infections and enhancing patient safety.

P-45
Adverse reaction among blood donors in Guyana

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Objective: To analyze the relationship between environmental and socio-demographic factors and the occurrence of adverse reactions among blood donors in Guyana.

Methods: We conducted a study to determine the risk factors associated with adverse reactions from January to October 2023 among donors who met specific inclusion criteria. Donations were sourced from multiple locations, and data – collected through interviews and clinical examinations – were documented on a Donor Criteria Processing Form. Statistical analysis was performed using Stata 11.2. Risk factors for adverse events were identified using multivariate logistic regression. Ethical considerations and procedures were duly respected.

Results: Of 9,041 blood donations examined, 64.1% were male and 35% were female, with an average age (± SD) of 36.42 ± 0.12 years; 31.1% were first time donors. The overall risk of adverse reactions was 0.65% (59/9,041). The most common types of adverse reactions were dizziness (0.30%), nausea (0.23%), and sweating (0.22%). After stepwise multivariable selection, we identified the following risk factors: Being female (AOR, 1.76; 95% CI, 1.05-2.95; p-value =0.032), absence of air conditioning (AOR, 2.86; 95% CI, 1.70-4.79; p-value <0.001), increased risk, while risk was reduced with increasing age (AOR, 0.96;95% CI, 0.93-0.98; p-value =0.001).

Conclusion: There is a significant relationship between some environmental and sociodemographic factors and the occurrence of adverse reactions during blood donations. During blood donations, adverse reactions are twice as likely to occur among females (as compared to males) and three times more likely to occur in the absence of air conditioning. Additionally, adverse reactions are less likely to occur with increasing age.

P-46
Barriers and Opportunities to Climate Change Health Systems Strenghtentng in the Eastern Caribbean

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Objective: To assess the barriers and opportunities to strengthening climate resilient health systems in the Eastern Caribbean.

Methods: This narrative review highlights barriers and opportunities for strengthening the resilience of health systems against climate change in four Eastern Caribbean islands. We deduced information from desk reviews of the Health National Adaptation Plans for Climate Change, developed in 2022–2023, with the support of the Pan American Health Organization/World Health Organization. We conducted strengths, weaknesses, opportunities and threats analyses in preparation of the Health National Adaptation Plans from relevant documents provided by the health agencies, Ministries of Health, and online sources.

Results: Several barriers and opportunities were identified for climate resilient health systems in the sub-region. Some of these barriers included: an inadequate enabling governance and leadership environment, and the need for strengthening and re-orientation of the multi-sectoral approach to decision-making, as a condition for enhancing capabilities. Some opportunities included the general commitment among decision-makers from across the four Eastern Caribbean islands governments to address climate change adaptation and mitigation in a definitive manner; climate change and health focused inter-ministerial committees which can enhance multi-sectoral collaboration and strengthen ownership; and funding for climate change and health from development partners.

Conclusion: Caribbean small island states are well-placed to implement policies and operational frameworks for the application of adaptation and mitigation measures critical to building, managing and sustaining climate resilient health systems.

P-47

Distribution of ABO and Rh (D) blood group antigens among blood donors in Guyana

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Objective: This study aimed to examine the distribution of ABO and Rh-D blood groups among blood donors in Guyana.
Methods: This was a retrospective observational study carried out in the National Blood Transfusion Services in Guyana from January 2019 to December 2022. ABO and Rh (D) blood grouping of all the blood donors was carried out by tube agglutination method.
Results: Out of a total of 19785 donors, Two thousand twenty-three (2023) were ineligible donors 12632 (63.9%) were male donors and 7153 (36.2%) were female donors. The percentage and number of donors in the regions of Guyana were as follows: 1.6% (320) for Region 1; 4.3% (852) for Region 2; 6% (1193) for Region 3; 67.4% (13,332) for Region 4; 0.2% (32) for Region 5; 17.1% (3381) for Region 6; 0.4% (80) for Region 7; 0.6% (120) for Region 9 and 2.4% (470) for Region 10. Blood group O was the most common blood type 48.1% (9508), followed by blood group B with 20.0% (3958), blood group A with 17.8% (3528), and blood group AB with 3.9% (768). Rh (D) positive donor distributions were Group A 95.5 % (3369), Group B 95.7 % (3786), Group O 93.8% (8923), and Group AB 93.6% (719) respectively. The majority of the blood donors were from Region 4 and the least donors were from Region 7.
Conclusion: Although there was a sharp decline in the number of donors from 2019 to 2022, specifically blood group A had a sharp decline. The order of prevalence of the blood group from most to least prevalent was O>B>A>AB except for regions 1 & 3.

P-48

The effectiveness of self-care intervention model on quality of life of burn patients admitted to the Burn Care Unit Georgetown Public Hospital Corporation, Guyana

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Objective: To assess the effectiveness of self-care intervention model on quality of life of burn patients admitted to the Burn Care Unit GPHC, Guyana.
Methods: An experimental study was conducted on 20 purposively selected burn patients.

Data was collected using the Burn Specific Health Scale (BSHS), Rosenberg SelfSelf- Esteem Scale (RSES), and WHOQOL Brief tools. Self Self-care nursing intervention model included exercise, nutrition, and activity of daily living techniques for improving self self-care. Ethical approval was obtained from IRB, Ministry of Health, Guyana.
Results: Ten (50%) were 18–38 years, 14 (70%) males. 12 (60%) African, 7 (35%) unemployed. 12 (60%) received burns from flames and 19 (95%) had less than 50% total body surface area burns. 9 (45%) suffered second degree burns. RSES pre pre-and post post-test scores showed slight variation such as 45% and 50% patients felt good about themselves, 50% and 65% strongly disagreed that they are inclined to feel like a failure in pre and posttest respectively. BSHS scores showed patients had similar level of difficulty in performing self self-care activities prior and after the intervention. Forty-five per cent (45% of participants had expressed good quality of life prior to the intervention whereas after the intervention 50% participants stated that they have a good quality of life., 30% and 35% were satisfied with their health in pre and post test respectively.
Conclusion: Results showed slight improvement in self -esteem and quality of life of burn patients after the implementation of Self Self-care intervention model.

P-49

Perceptions of Registered Nurses at the public hospital and selected health centers regarding the mandatory continuous nursing education.

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Objective: To identify registered nurse's perceptions regarding mandatory continuous nursing education (MCNE) as well as to identify the nurse's challenges and factors pertaining to MCNE.
Methods: The investigation was carried out during May and June of 2023 at the public hospital and three selected health centers. For this research a simple random sampling technique was used to collect data. A total of 260 nurses participated in the quantitative study and eight nurses partici-

pated in the focus group discussion. The data from the focus group was later compiled for themes and codes. A mixed method approach was used for this study.
Results: The majority of nurses (87%) believed that CNEs would be beneficial to them individually, and 82.7% agreed that CNEs would improve the standard of healthcare delivery at various institutions. Only 25.4% of nurses argued that Guyana is not ready for such a mandate, while 63.4% of nurses overall believed professional development should be mandatory. Furthermore, 45.4% of participants stated that would require too much time to attend CNE seminars, while 47.3% of participants said their biggest challenge would be the seminars' physical location.

The following themes and sub-themes emerged from the interview for the qualitative portion of the study: 1) Perceived challenges of the newly mandated CNE mandate: Nurses' general concerns and psychological stress; 2) and CNEs' benefits: CNE's will enhance the standard of health care delivery.
Conclusion: Despite challenges, nurses remained optimistic about pursuing CNE. However, Guyana should dedicate greater emphasis to promote the development of MCNE.

P-50
Development of Scientific and Clinical research Cooperation in the Caribbean: A new bibliometric Internet platform (DOSCCAR)

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Objective: The Caribbean's unique epidemiological challenges necessitate concerted efforts in public health. With prevalent vector-borne diseases and high rates of cardiovascular conditions and cancers, collaboration between Caribbean countries is crucial. This study aims to propose an interactive website platform to identify research profiles, addressing collaboration, research areas, impact on the scientific community, and alignment with public health issues.
Methods: Utilizing Web of Science and Medline-indexed publications, bibliometric indicators were employed to analyze scientific output from 1988 to 2022 across 20 Caribbean countries/islands. Quantitative indicators, performance metrics, and visualization tools facilitated comprehensive analysis. The interactive website, developed in PHP with MySQL Database, provides detailed insights through graphical representations and interactive maps.
Results: The DOSCCAR website offers 189 graphics and 64 videos, showcasing collaborative networks, research themes, and publication trends. It provides a multilingual interface (French, English, Spanish) for accessibility. Graphs address collaboration patterns, research areas, impact on the scientific community, and alignment with public health issues, facilitating comprehensive analysis.
Conclusion: The DOSCCAR study underscores the importance of collaboration in addressing common public health challenges in the Caribbean. While some countries show potential for scientific output, collaboration within the region remains suboptimal. Initiatives such as Martinique and Guadeloupe's integration into the OECS demonstrate progress, but more efforts are needed to foster scientific collaboration. Identifying stakeholders and facilitating collaboration are essential to drive local research development. Strengthening collaborative efforts among Caribbean nations is imperative to address shared public health concerns effectively.

P-51
A cross-sectional study of the training status and of the knowledge, attitudes, and practices of food handlers in temporary restaurants in Barbados

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Objective: To investigate the knowledge, attitudes, and practices of food handlers in temporary restaurants in Barbados
Methods: A cross-sectional study via anonymized interviewer-administered questionnaires investigating the knowledge, attitudes, and practices of adult food handlers working within temporary restaurants in Barbados. The study targeted food handlers from licensed temporary restaurants at events from February – August 2023. A systematic sampling method with a calculated sample size of 461 (95% CI) enrolled every second eligible participant from event-specific food handler lists. Data was managed using REDCap (online survey and database web application) and analyzed using Stata software.
Results: One hundred and seventy-one participants, mean age 38 ± SD years and mainly female (77%) were recruited. Most (69%) had over 5 years of food handling experience and half (52%) had prior food safety training. Education level was significantly associated with food handling training status ($p=0.014$). Most participants had at least secondary school-level education. There was a significant inverse relationship between years of experience and food handler training ($p<0.0001$). Gender ($p=0.116$) was significantly associated with training. Most respondents knew that proper hand hygiene prevents food contamination (98%) and jewelry wearing was unsafe (75%). Trained respondents were 8.21 times more likely to agree that raw and cooked foods should be stored separately. Most respondents (83%)

reported consistently cleaning their hands before handling food, however, 25% reported bar soap use. Trained food handlers were ten times more likely to conform to adequate nail hygiene (OR = 9.74, 95% CI: 2.15-44.06)
Conclusion: Investigating food handlers' knowledge, attitudes, and practices can inform interventions to reduce foodborne diseases from street food consumption. Findings indicate that food handler's training is an important factor in promoting better knowledge, more positive attitudes, and safer practices among Barbadian street food vendors.

P-52

Basic Life Support: Knowledge, Attitude and Practices of Healthcare Personnel at Selected Institutions in Region 4

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Objective: To assess knowledge, attitudes and practices of healthcare professionals working at select institutions in region 4 concerning their knowledge on Basic Life Support (BLS) as well as their attitudes and common practices they engage in on a daily basis with regards to BLS.
Methods: This was a multi-center cross-sectional mixed study conducted among healthcare workers (HCWs) in Guyana using a structured questionnaire and involved HCWs from Georgetown Public Hospital Corporation (GPHC) and The Infectious disease Hospital of Guyana (IDHG). A sample size of 208 participants were used.
Results: 28% of participants had good knowledge, 97% had positive attitudes and 60% had good practices on BLS. Participants' own assessment of their BLS knowledge was a predictor for Knowledge, attitude and Practice while prior BLS training and whether or not a participant has been in a position to administer CPR before were also predictors for practice.
Conclusion: This research shows that the BLS knowledge of healthcare workers (doctors, RNs, PCAs, and NAs) in Guyana is grossly inadequate which becomes a critical issue and needs to be addressed as soon as possible.

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Knowledge, Attitudes and Practices (KAP) of Female Students of the University of Guyana Regarding Pap Smears

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Objective: To determine the Knowledge, Attitude & Practices (KAP) of female University of Guyana Students about pap smears.
Methods: This cross-sectional, quantitative study surveyed 203 female students between the ages of 21 and 65 from 8 faculties at the University of Guyana. A piloted, self-administered questionnaire was used via Google Forms to ascertain the KAP of the students about pap smears. The Bloom's Cut-off score was used to assess the knowledge of respondents while a Likert scale was used to assess Attitude. All data were analysed using SPSS v. 26 with the chi square test being used to test the relationship between sexual history and the KAP. p-value <0.05 = statistical significance.
Results: 67% of participants with a sexual history had good knowledge about pap smears when compared to those without a sexual history (58%). Despite this, only a small fraction of respondents was knowledgeable about correct screening protocols. The study found a significant inverse association ($p=0.001$) between knowledge level and positive attitude towards pap smears, i.e., women with at least satisfactory knowledge were more likely to have a positive attitude about pap smears and were more likely to obtain one. These women were less likely to believe pap smears were only necessary when recommended by physicians. Only 34% of respondents had obtained at least one pap smear. 'Being too busy' and 'being afraid of the pain' were the major reasons identified for never having a pap smear.
Conclusion: This study revealed that despite having good knowledge and positive attitudes towards pap smears, most female students at UG have never obtained one. This is often due to their busyness and fear of pain. Those who did often did so on their own without a doctor's request and usually do not follow up.

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Job Satisfaction Among Physicians at a Tertiary Care Institution in Georgetown Guyana.

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Objective: To determine how demography correlates with job satisfaction among physicians at a tertiary care institution in Guyana.
Methods: Using convenience sampling, 46 physicians from a tertiary care institution in Guyana responded to a hospital wide email that requested their participation. Each physician was given a questionnaire which was a modified version of the Minnesota Satisfaction Questionnaire which gives a total satisfaction score (TSS) and 20 different sub-

scores. Total and sub-scores were calculated. Gender effects were tested using the student's t test, while age effects were tested using regression analysis.

Results: There were 30(65.2%) males and 16(34.7%) females with a mean age of 32.1(sd=4.65) years. The TSS ranged from 151-494 with a mean of 322.28(sd=66.84). Each subscale had a maximum possible score of 25. Of the 20 sub-scales, satisfaction with the level of service provided by themselves received the highest mean equalling 18.02(sd=4.83) while the level of compensation received the lowest mean score equalling 13.8(sd=5.94). There was no significant relationship between gender and the TSS or any of the subscales. There was no correlation between age and TSS, but there was a positive correlation between age and satisfaction with compensation (r=0.3504, p=0.017) and working conditions (r=0.3525, p=0.016).

Conclusion: There is no relationship between gender and age with job satisfaction among the physicians at this institution. Physicians were most satisfied with the level of service that they provide and least satisfied with their compensation. Older physicians are more likely to be satisfied with their working conditions and compensation. The results from this study allow for targeted interventions for recruitment and retention of physicians.

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Environmental factors that contribute to falling among the elderly population in two geriatric homes in Guyana

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Objective: To investigate the prevalence and environmental factors that may contribute to the risk of falls among the elderly population aged 65 years and older in two geriatric homes in Guyana

Methods: Quantitative research was conducted with the use of the Falls Risk Assessment Tool (FRAT) and the Home Falls and Accidents Screening Tool (HOME FAST). The relationship between environmental factors and falling were analyzed using a one-sampled T-test and bivariate correlations (Pearson) via Statistical Package for the Social Sciences (SPSS).

Results: In a study involving 110 elderly patients, comprising 54 males and 56 females, factors contributing to falls were examined. It was found that females (56.7%) and individuals aged 70–79 experienced a significant majority of falls. One notable finding was that 53.5% of participants who fell were not taking any medications. The study also identified common environmental hazards such as unsafe floor surfaces (80%; odds ratio (OR) for falls: 1.20 [95% confidence interval: 1.03-1.36]), inadequate lighting (72%; OR: 1.28 [1.09-1.47]), and light switches positioned far from the bed (72%; OR: 1.28 [1.09-1.47]). Falls were most frequently reported in the shower (46.7%) area, followed by the bedroom (26.7%), and the living room (13.3%).

Conclusion: Environmental hazards showed significant associations with falls. The high number of environmental hazards within the two geriatric homes and their association with falling underlines the importance of enhancing environmental safety, and the importance of policy development, allocation of resources, and fall interventions. A significant majority of the study population were mentally stable.

Index of Participants