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32nd Annual Research Conference

Health Resilience in a Changing World: Evidence, Innovation and Practice

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The University of the West Indies
Mona, Kingston
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FMS 32nd Annual Research Conference

Theme: Health resilience in a changing world: Evidence, Innovation and Practice

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DEAN'S MESSAGE

Professor Joseph Plummer MB.BS, DM (Surg), FASCRS, FACS

It is my pleasure to welcome readers to this special supplement of the West Indian Medical Journal, featuring selected abstracts from the 32nd Faculty of Medical Sciences Annual Research Conference, under the theme "Health Resilience in a Changing World: Evidence, Innovation and Practice." This publication represents an important milestone in our continued commitment to advancing scientific inquiry and strengthening the research culture within our Faculty.

The University of the West Indies, together with other local research and academic institutions, have a mandate to provide thought leadership, particularly in addressing the complex challenges facing our society. This responsibility requires us not only to educate and train future generations of professionals, but also to undertake the rigorous, relevant and innovative research needed to understand our problems and develop solutions grounded in the realities of our people. We must be prepared to ask difficult questions, challenge existing assumptions and generate evidence that informs policy, shapes practice and drives sustainable development.

This mandate carries significance far beyond our immediate region. Low- and middle-income countries (LMICs) are home to approximately 80% of the world's population. Research that responds to the health priorities and lived realities of these populations therefore has the potential to yield benefits on a global scale. By investing in locally relevant research, strengthening our research capacity and ensuring that our findings inform clinical practice and public policy, we can contribute solutions that are both responsive to Caribbean needs and applicable to other resource-constrained settings around the world.

The FMS Annual Research Conference provides an important platform for this work. It brings together faculty members, clinicians, researchers, postgraduate students and undergraduate students to share findings, exchange ideas and foster collaborations across disciplines. Their engagement helps to cultivate the next generation of researchers and thought leaders who will shape the future of health in Jamaica, the Caribbean and beyond.

The publication of selected conference abstracts in this supplement is an important step in extending the reach and impact of the research presented. It provides an opportunity for the wider scientific and medical community to engage with emerging findings and underscores the importance of disseminating research beyond the conference setting. I encourage our researchers to build on these initial contributions by developing their work into full manuscripts and pursuing publication in peer-reviewed journals, thereby strengthening the evidence base available to inform practice, policy and future investigations.

I extend sincere appreciation to the members of the Faculty of Medical Sciences, our research partners, conference organisers, reviewers, presenters and students whose dedication and collaboration have made this initiative possible. I also acknowledge the West Indian Medical Journal for providing a valuable avenue through which our research can reach a broader audience.

As we advance our research mission, let us remain focused on producing knowledge that informs decisions, addresses societal needs and builds a healthier, more resilient future for Jamaica, the Caribbean and the wider world.

DEPUTY DEAN'S MESSAGE

Jasneth Mullings, Ph.D.

It is a pleasure to address our community on the occasion of the 32nd Annual Research Conference and to congratulate the Faculty of Medical Sciences on its achievements in research. Across our departments, our Researchers, Supervisors, Research Liaison Officers, Administrators and students have worked with dedication and a shared belief that research is central to our mission of improving health in Jamaica, the Caribbean, and beyond. The Faculty's growing body of scholarship reflects the commitment of every department and every person who has contributed to it.

These achievements rest on a strong foundation of capacity building. Through the Clinical Translational Research Unit (CTRU), we are working to equip scientists and health professionals with the skills that modern research demands. Our workshops, seminars, and training in research tools, together with support for grant writing and publication, are helping undergraduate and postgraduate students and faculty at every career stage, to produce research of the highest quality. Our expanding research repository and our partnerships with departments across the University of the West Indies (UWI), Mona, external partners and collaborators, as well as our student associations, are strengthening a culture of collaboration across the Faculty.

Today marks a milestone: we launch the first set of awards from the Faculty's pioneering Research Support Fund, which will support the work of our junior faculty and postgraduate students. We look forward to their sharing the findings of their research, which will help us lay a new landscape for action research and policy-shaping outcomes. This fund will continue to support early-mid and late-career researchers and research students.

We also welcome the re-introduction of a key partner in research, our very own West Indian Medical Journal (WIMJ). A strong journal of our own gives our researchers a trusted home for their findings and a direct route to the regional and international audiences who can put them to use.

Looking ahead to 2026–27, our direction is guided by the UWI Triple A Strategy: Access, Alignment, and Agility.

- **Access:** We will widen opportunities for research training and development, so that more leaders and students can contribute to research of greater quantity and quality.
- **Alignment:** We will keep pace with global standards for research and innovation and pursue grant funding that sustains our work.
- **Agility:** We will respond to a changing research landscape by building new partnerships, identifying new resources, and strengthening our collaborations locally, regionally and globally.

Several initiatives will carry this agenda forward. The FMS Annual Research Conference and our research showcase will increase the visibility of our work. We will build stronger links with our government ministries and agencies, as well as with non-governmental organizations, so that we can expand our influence on practice and policy and strengthen our research legacy. We will develop Faculty-wide research databases and a monitoring and evaluation framework to track our outputs and outcomes. We will also invest in infrastructure and in research risk assessment and management, so that our work is conducted safely and responsibly.

We sincerely thank our sponsors, contributors, collaborators, institutional leaders, members of faculty, and students who continue to support the growth and development of the Faculty of Medical Sciences. To all of you, congratulations on what you have achieved. I invite you to continue to engage and to help shape the next chapter of research in the Faculty of Medical Sciences, Mona.

CHAIR'S MESSAGE

Sandra Boyne, M.Phil.

It was a privilege to serve as Chair of the 32nd Faculty of Medical Sciences (FMS) Annual Research Conference, held on November 12, 2026, under the theme "Health Resilience in a Changing World: Evidence, Innovation and Practice."

The Annual Research Conference remains an important platform for showcasing the breadth and quality of research undertaken by members of the Faculty of Medical Sciences and our wider academic and clinical communities. The publication of selected abstracts in this supplement represents an important opportunity to share research findings, stimulate scholarly discussion, and contribute to the growing body of evidence that informs health policy, clinical practice, and public health interventions in Jamaica and the wider Caribbean.

This year's theme is particularly relevant in the current global research climate. Health systems worldwide are being challenged by climate change, emerging and re-emerging health threats, evolving disease patterns, and increasing demands for more effective, equitable, and sustainable healthcare. At the same time, advances in technology, including artificial intelligence, are creating new possibilities for research, diagnosis, and healthcare delivery. Building health resilience requires us not only to generate high-quality evidence and embrace innovation, but also to translate research findings into meaningful improvements in health outcomes. The work presented at this conference reflects the importance of addressing these challenges through multidisciplinary collaboration, relevant research, and the practical application of scientific knowledge.

I extend my sincere appreciation to all members of the Faculty of Medical Sciences who contributed to and participated in the conference. I particularly wish to recognize our medical students, whose involvement demonstrates a commendable interest in research and a willingness to develop the skills necessary for evidence-based practice and future research leadership. Opportunities to present and discuss research findings are invaluable in strengthening critical thinking, scientific communication, and the ability to evaluate and apply evidence. I encourage our students and early-career researchers to continue nurturing their curiosity and to remain actively engaged in research.

My heartfelt thanks go to the members of the Organizing Committee. Their dedication, hard work, and attention to detail were instrumental in pulling together the many moving parts of this conference. The time and effort invested in coordinating the scientific programme, reviewing abstracts, securing sponsorship, and managing the many logistical requirements are deeply appreciated. I also acknowledge the presenters, reviewers, session chairs, plenary speakers, sponsors, and all others whose contributions helped to make the conference a success.

Finally, I congratulate the researchers whose abstracts have been selected for inclusion in this supplement. It is my fervent wish that this publication serves not only as recognition of their scholarly contributions, but also as encouragement to continue pursuing research that addresses our most pressing health challenges.

As we look to the future, let us remain committed to advancing research, fostering innovation, strengthening collaboration, and translating evidence into practice in pursuit of a more resilient and healthier Caribbean.

ABOUT THE CONFERENCE

The Faculty of Medical Sciences (FMS), The University of the West Indies, Mona, convenes its 32nd Annual Research Conference on Thursday, November 12, 2026, under the theme "Health Resilience in a Changing World: Evidence, Innovation and Practice." The conference provides a forum for researchers, clinicians, students and other health professionals to share original research findings, exchange ideas, and explore innovative approaches to addressing evolving health challenges in Jamaica, the Caribbean and the wider global community.

The conference highlights the critical role of research, innovation and evidence-based practice in strengthening health systems and building resilience in a rapidly changing world. The scientific programme is built around four sessions: Health Systems and Resilience; Innovation and Technology; Climate, Environment and Emerging Health Threats; and Evidence-Based Practice and Translational Research. With plenary lectures, oral presentations, and poster presentations, the conference facilitates dialogue across disciplines and encourages collaboration among researchers and practitioners.

One main objective of the conference is to promote a culture of research and scholarly curiosity within the Faculty of Medical Sciences, while providing opportunities for established researchers and emerging scholars, including medical students, to present their work, receive feedback and contribute to the advancement of health knowledge. The conference also seeks to strengthen the connection between research evidence and clinical practice, supporting the development of solutions that can improve health outcomes and improve the resilience of individuals, communities and health systems.

By bringing together members of the academic, clinical and wider health research communities, the FMS Annual Research Conference continues to provide an important platform for sharing knowledge, fostering collaboration and advancing health research and innovation across the Caribbean.

PROGRAMME OVERVIEW

	TIME	PROGRAMME
	7:30 – 8:30 a.m.	Registration & Poster Viewing
		SESSION 1 - HEALTH SYSTEMS AND RESILIENCE **Chair: Dr. Jasneth Mullings**
	8:30 – 9:00 a.m.	Welcome, Opening Remarks and Conference Overview Dean's Remarks
	9:00 – 9:30 a.m.	**Plenary Lecture 1** - Building health resilience through research, innovation and collaboration Dr. Paul Edwards, PAHO/WHO Advisor for Health Systems and Services
(O-01)	9:30 – 9:40 a.m.	Prematurity has a price: Quantifying NICU costs in a lower-middle-income Caribbean setting (Child Health)
(O-02)	9:40 – 9:50 a.m.	Acute kidney injury in critically ill children admitted to a mixed adult-paediatric intensive care unit in Jamaica: a retrospective cohort study (Child Health)
(O-03)	9:50 – 10:00 a.m.	The Prevalence of Frailty in Elderly Patients Undergoing Emergency Surgery at a Tertiary Centre in Jamaica (SURRADIC)
(O-04)	10:00 – 10:10 a.m.	Incidence of in-hospital all-cause mortality of Intensive Care Unit admissions at the University Hospital of the West Indies (SURRADIC)
(O-05)	10:10 – 10:20 a.m.	Patient satisfaction with customer service delivery in the emergency department of the University Hospital of the West Indies (SURRADIC)
	10:20 – 10:30 a.m.	Q&A
	10:30 – 11:30 a.m.	Coffee Break and Poster Viewing
		SESSION 2 - INNOVATION AND TECHNOLOGY **Chair: Dr. Tracey Gibson**
	11:30 a.m. – 12:00 p.m.	**Plenary Lecture 2** - Artificial Intelligence and the future of Healthcare Dr. Andrew Evans, Chief of Pathology, Medical Director of Laboratory Medicine, Cortelluci Vaughn Hospital, Ontario, Canada
(O-06)	12:00 – 12:10 p.m.	To compare the evaluation of Ki-67 proliferative index by pathologist (manual count) vs artificial intelligence in pituitary neuroendocrine tumours (pituitary adenomas) diagnosed at the University Hospital of the West Indies (2015–2024) - Oral presentation (Pathology)
(O-07)	12:10 – 12:20 p.m.	Cystatin C as a predictive biomarker of acute kidney injury in patients undergoing cardiopulmonary bypass surgery (Pathology)
(O-08)	12:20 – 12:30 p.m.	The current state of point-of-care ultrasound (POCUS) use in emergency departments in Jamaica's southeast region (SURRADIC)
(O-09)	12:30 – 12:40 p.m.	Anxiolytic effects of an ethyl acetate extract of *Arachis hypogaea* (peanut) Testa in mice (BMS)
(O-10)	12:40 – 12:50 p.m.	Investigation of the effects of an ethyl acetate extract of the Arachis hypogaea Testa on memory in mice (BMS)
	12:50 – 1:00 p.m.	Q&A
	1:00 – 2:00 p.m.	Lunch Break and Poster Viewing

SESSION 3 - CLIMATE, ENVIRONMENT AND EMERGING HEALTH THREATS
Chair: Prof. Maxine Gossell-Williams

	2:00 – 2:30 p.m.	**Plenary Lecture 3** - Environmental Health Challenges in the Caribbean Dr. Nicole Dawkins-Wright, Director, Emergency, Disaster Management & Special Services, Ministry of Health & Wellness
(O-11)	2:30 – 2:40 p.m.	Burden, resistance profiles, and susceptibility predictors of extended-spectrum β-lactamase-producing uropathogens at a Jamaican tertiary care hospital: A seven-year retrospective laboratory-based cross-sectional study (Microbiology)
(O-12)	2:40 – 2:50 p.m.	Sickle cell disease associated with distinct clinical presentation and higher morbidity among children hospitalized for lower respiratory tract infection (Child Health)
(O-13)	2:50 – 3:00 p.m.	Insufficient sleep and its association with depressive symptoms, substance use, community violence and physical activity among Jamaican adolescents and young adults (Child Health)
(O-14)	3:00 – 3:10 p.m.	The prevalence of cognitive impairment and associated risk factors among older adults attending primary care clinics in New Providence, The Bahamas (School of Clinical Medicine & Research)
(O-15)	3:10 – 3:20 p.m.	Knowledge, attitudes and practices of parents towards childhood obesity in urban Jamaica (Child Health)
	3:20 – 3:30 p.m.	Q&A

SESSION 4 - EVIDENCE-BASED PRACTICE AND TRANSLATIONAL RESEARCH
Chair: Dr. Jillian Lewis

3:30 – 4:00 p.m.	**Plenary Lecture 4** - Bridging the Gap Between Research and Clinical Practice Professor Colette Cunningham-Myrie, Professor of Public Health, Epidemiology and Family Medicine
4:00 – 5:00 p.m.	Closing Ceremony Best Poster Awards FMS Research Support Fund - Grant Awardees Vote of Thanks - Dr. Gail Nelson

ORAL ABSTRACTS

O-01

Prematurity has a price: Quantifying NICU costs in a lower-middle-income Caribbean setting

S Anderson-Gabriel, O Olugbuyi, B Crosdale, H Trotman
Department of Child & Adolescent Health, Faculty of Medical Sciences, UWI, Mona

Background: Prematurity, particularly before 32 weeks gestation, imposes a substantial burden on neonatal intensive care systems worldwide. While Neonatal Intensive Care Unit costs in high-income settings are well characterized, equivalent data from low and middle-income countries remain limited. This study aimed to document the cost of neonatal intensive care at the University Hospital of the West Indies (UHWI), Kingston Jamaica.
Methods: Neonates born <32 weeks, admitted between January 1, 2022 and December 31, 2023 were included. Clinical, demographic, and cost data were extracted from medical records and electronic billing systems. Costs represented direct hospital charges only. Descriptive analyses were performed, group differences were assessed using the Mann-Whitney U test and Kruskal-Wallis test. Generalized linear models identified independent factors associated with cost and statistical significance was assigned at $p < 0.05$.
Results: Ninety-one neonates were included in the study with cost data available for 84. The median total cost of NICU care was USD 2,768.83 (IQR 1,445.87–5,248.33). By gestational age, neonates born <25 weeks incurred a median cost of USD 2,325.84 (IQR 612.14–4,056.41). Infants born at 25–27 weeks incurred a median cost of USD 2,141.77 (IQR 1,319.77–9,631.02), compared with USD 3,183.19 (IQR 1,556.95–5,111.80) at 28–30 weeks and USD 2,273.84 (IQR 1,124.70–2,919.61) at 31–<32 weeks. Differences across gestational age bands were not statistically significant on unadjusted analysis (Kruskal-Wallis $p = 0.48$). Multivariable regression analysis identified sepsis (70% increase, $p < 0.001$), anaemia (49% increase, $p = 0.003$), and longer hospitalization (1.1% increase per day, $p = 0.001$) as significant contributors to increased cost.
Conclusion: NICU costs for neonates below 32 weeks at UHWI are increased by length of stay and comorbidities. Policies to decrease NICU costs should focus on preventing prematurity and decreasing neonatal morbidities.

O-02

Acute kidney injury in critically ill children admitted to a mixed adult-paediatric intensive care unit in Jamaica: A retrospective cohort study

D Virtue, K Innis, N Mclean, R Thomas-Chen
Department of Child and Adolescent Health, Faculty of Medical Sciences, The University of the West Indies, Mona

Background: Acute kidney injury (AKI) is common in critically ill children and is associated with increased morbidity and mortality, yet no published data describe AKI in critically ill children in Jamaica. We aimed to determine AKI prevalence, KDIGO stage-specific clinical and laboratory features, and outcomes among children admitted to a mixed adult-pediatric intensive care unit (ICU) at a tertiary centre.
Methods: Retrospective chart review of children aged 1 month to 16 years admitted to the ICU at the University Hospital of the West Indies, Jamaica, from January 2020 to December 2024. AKI was defined and staged using Kidney Disease: Improving Global Outcomes (KDIGO) criteria. Demographic, clinical and laboratory data were collected; characteristics were compared across KDIGO stages using Fisher's exact and Mann-Whitney U tests.
Results: Complete records were available for 72 of 98 eligible children (73.4%); 19 (26.3%) had AKI. Median age was 12 years (IQR 7 – 14); chronic illness was present in 12 (63.2%). All patients required mechanical ventilation. 9 patients (47.4%) had maximum stage 1 AKI and 10 (52.6%) had stage 3; none peaked at stage 2. Compared with stage 1, stage 3 AKI was associated with a higher prevalence of chronic illness (90.0% vs. 33.3%, $p = 0.020$), higher peak peripheral WBC (40.31 vs. 22.70 x 109/L, $p = 0.027$), and lower nadir albumin (17.50 vs. 22.50 g/L, $p = 0.027$). ICU length of stay was longer in stage 3 (23.50 days vs. 12.00 days), but not significant ($p = 0.497$).
Conclusion: AKI affected roughly one in four critically ill children in this ICU. Severe (stage 3) AKI was associated with chronic illness, more severe leukocytosis and hypoalbuminemia. – These routinely available markers may help identify children at risk of progression where advanced renal biomarkers are unavailable. Prospective studies are needed to confirm these associations as independent predictors.

O-03

The prevalence of frailty in elderly patients undergoing emergency surgery at a tertiary centre in Jamaica

S Milton[1]*, P Toppin*[2]
[1]*University Hospital of the West Indies, Kingston Jamaica;* [2]*The University of the West Indies, Mona Campus, Jamaica*

Background: Frailty is a state of increased physiological vulnerability characterized by diminished reserve and impaired ability to withstand physiological stress. It independently predicts adverse surgical outcomes yet remains understudied in low- and middle-income countries. We determined frailty prevalence in elderly emergency surgical patients at a Caribbean tertiary hospital.
Methods: A cross-sectional study of patients ≥60 years undergoing emergency surgery at University Hospital of the West Indies (January–July 2025). Frailty was assessed using the modified Frailty Index-11 (mFI-11). Primary outcome: frailty prevalence. Secondary outcomes: associations between frailty and 30-day mortality, length of hospital stay, and postoperative complications.
Results: Of 174 included patients (mean age 73 ± 9 years; 60% male), frailty prevalence was 67%; 28% had mild, 25% moderate, and 14% severe frailty. Frail patients were significantly older (75 vs. 71 years; p = 0.005) with higher American Society of Anaesthetists (ASA) scores (p <0.001). In-hospital mortality was 19%. Frailty independently predicted 30-day mortality (OR 4.07, 95% CI: 1.27–13.0, p = 0.027) after adjustment for age and ASA score. ASA ≥4/5 was strongly associated with mortality (OR 25.4, p <0.001), whereas age alone was not significant. Frailty was associated with a statistically non-significant 4-day increase in length of stay (p = 0.11, non-significant). Acute kidney injury (18%) was more common in frail patients but the difference was not statistically significant (21% vs. 13%; p = 0.2).
Conclusions: Frailty was highly prevalent and independently associated with mortality, demonstrating that physiological vulnerability, not chronological age, drives surgical risk. These findings support routine frailty screening and multidisciplinary perioperative optimization to improve outcomes and inform resource allocation in this vulnerable Caribbean population.

O-04

Incidence of in-hospital all-cause mortality of intensive care unit admissions at the University Hospital of the West Indies (UHWI)

S Sawh, I Tennant
Department of Surgery, Radiology, Anaesthesia and Intensive Care, The University of the West Indies, Mona

Background: There is wide variation in intensive care unit (ICU) mortality rates globally. ICU scoring systems are useful for prognostication of patients and assessment of performance outcomes. The aim of this study was to evaluate ICU mortality in a mixed/ general unit at the University Hospital of the West Indies (UHWI), Jamaica and to assess the validity of the Simplified Acute Physiology Score II (SAPS II) in this ICU population.
Methods: This was a prospective, cohort study conducted over 10 months (September 2024 to July 2025). Patients were followed up until their discharge from hospital or death. Data was compiled from electronic medical records to calculate a SAPS II score at admission. Data were analyzed using the Statistical Package for the Social Sciences [SPSS] version 29.
Results: 185 patients were included, with a mean SAPS II score of 45.7 ± 22.8, and median of 43 (IQR 26, 61). The overall mortality rate observed was 39.5% (73 patients) of which 27.6% (51 patients) demised in ICU and a further 11.9% (22 patients) died subsequently on the wards, post-ICU discharge. The overall predicted mortality rate was 39.7%, and hence the ratio of observed to predicted mortality (the standardized mortality ratio) was 0.99. Risk factors for increased mortality included a diagnosis of sepsis and heart failure and the need for invasive support. The SAPS II score produced an Area Under the Receiver Operator Curve (AUC- ROC) of 0.758 (95% CI 0.661, 0.854) but demonstrated poor calibration for our population, with underestimation at low SAPS II scores and overestimation at higher scores.
Conclusion: The UHWI ICU mortality and total in-hospital mortality rates approximate those reported regionally and in similar income countries. The SAPS II score is valid for determining risk categories in our population, but less so for individual patient prognostication. Patients with SAPS II scores of over 40 points are at high risk for increased mortality.

O-05

Patient satisfaction with customer service delivery in the Emergency Department of the University Hospital of the West Indies

LC Lee[1]*, A Baker*[2]*, E Williams*[3]
[1]*Department of Emergency Medicine, Cheshire Hall Medical Centre, Turks and Caicos Islands;* [2]*Department of Surgery, University Hospital of the West Indies, Jamaica;* [3]*Department of Emergency Medicine, University Hospital of the West Indies, Jamaica*

Background: Patient satisfaction is a key indicator of healthcare quality and an important measure of service delivery in emergency medicine. Despite its importance, no published studies have evaluated patient satisfaction within the Emergency Department (ED) at the University Hospital

of the West Indies (UHWI). This study assessed patient satisfaction across multiple domains of care to identify areas for quality improvement and inform local policies and protocols.

Methods: A cross-sectional study was conducted among patients presenting to the UHWI ED between 1 March and 31 May 2024 across all five Emergency Severity Index (ESI) triage categories, which classify patients by clinical urgency and anticipated resource needs, from level 1 (most urgent/high acuity) to level 5 (least urgent/low acuity). Participants completed the validated Brief Emergency Department Patient Satisfaction Scale (BEDPSS), administered by a blinded research assistant. Data were entered into REDCap and analysed using R (Version 4.4.1). Continuous variables were summarised using medians and interquartile ranges, categorical variables using frequencies and percentages, and Likert-scale responses were analysed using proportional odds logistic regression. Statistical significance was set at $p < 0.05$.

Results: A total of 418 patients participated (median age 49 years; 54% female). More than 90% reported favourable satisfaction with the ED environment, nursing care, physician interactions, and family engagement. However, approximately 30% expressed dissatisfaction with waiting times. Satisfaction was not associated with age, sex, or educational attainment. Compared with patients in the most clinically urgent triage categories (ESI 1–2), those with less clinically urgent presentations (ESI 4–5) reported significantly lower satisfaction across several domains, including the ED environment, physician communication, and overall care. Previous ED attendance was associated with lower satisfaction regarding pain management and physician communication.

Conclusions: Overall patient satisfaction with customer service delivery was high. Patients with less clinically urgent presentations (ESI 4–5) were less satisfied, primarily due to waiting times and communication. Targeted interventions aimed at improving communication and managing perceived waiting times may further enhance patient experience in the UHWI ED.

O-06

To compare the evaluation of Ki-67 proliferative index by pathologist (manual count) vs artificial intelligence in pituitary neuroendocrine tumours (pituitary adenomas) diagnosed at the University Hospital of the West Indies (2015–2024).

A Gordon-Whyte, J Jaggon, R Thompson, A Baker
Department of Pathology, Faculty of Medical Sciences, The University of the West Indies, Mona Campus.

Background: Pituitary Neuroendocrine tumours (PitNET) were thought to be a benign entity with indolent behaviour. However these tumours have wide variability in behaviour, including local invasion and recurrence. There is currently no consensus on a prognostic marker; however, the World Health Organization (WHO) has suggested the use of invasiveness and proliferative activity by way of mitotic count and Ki67 proliferative index as markers of high grade potential.

This study compares the use of Artificial Intelligence (AI) in evaluating Ki67 proliferation with that of the manual count by pathologist.

Methods: The study looked at 75 PitNETs diagnosed in the Department of Pathology, University of the West Indies, Mona, during the period January 2015 to December 2024. Epidemiological, radiological and clinical records were analyzed. All cases underwent Ki67 immunohistochemical (IHC) testing and evaluation of Ki67, done both manually and using artificial intelligence.

Results: There was poor correlation between the pathologist's manual counting of Ki-67 and that of artificial intelligence. The Bland-Altman plot of pathologist count vs AI count Ki-67 shows a systematic bias of 2.2% of the AI score over the pathologist score. There was also evidence of proportional bias (worsening correlation as Ki-67 index increases) and heteroscedasticity (less reliability at higher values of Ki-67).

Conclusion: There was poor correlation between the Ki-67 manual count by pathologists vs that of the AI platform used. We however believe that there is room for further research with additional training of pathologists and the use of an appropriately trained and validated AI platform.

O-07

Cystatin C as a predictive biomarker of acute kidney injury in patients undergoing cardiopulmonary bypass surgery.

S Mohansingh[1], D McGrowder[1], A Soyibo[1], S Stephenson[1], S McFarlane[1], J Blankson[1], K Francis[1], G Seaman[1], O Ismail[2], R Hunte[1], M Townsend[1], J Benjamin[1], M Norman[1], L Dilworth[1]
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Background: Acute Kidney Injury (AKI) is common after cardiopulmonary bypass surgery. It increases morbidity, mortality, prolonged hospitalization, and progression to chronic kidney disease. Early diagnosis is critical for timely intervention. Serum creatinine, the conventional biomarker used to diagnose kidney injury, rises only after there is substantial loss of kidney function. Cystatin C has emerged as a promising early biomarker that detects kidney dysfunction earlier than creatinine

Methods: This prospective study was conducted between July 2024 – June 2025 at The University Hospital of the West Indies. 33 patients undergoing cardiopulmonary bypass (CPB) surgery were consented for the study. Serum samples were obtained pre-operatively, and at two hours, four

hours, twenty-four hours and then daily for up to four days after surgery. Samples were tested for creatinine and cystatin C concentrations. AKI patients were identified using KDIGO 3 guidelines for diagnosing AKI. The obtained concentrations were analysed using SPSS software to perform receiver operating characteristic (ROC) curve analysis.

Results: Of the 33 patients consented, two patients died perioperatively. From the remaining 31 patients, 10 developed AKI. ROC analysis of cystatin C had an area under the curve (AUC) of 0.933 (p = 0.00), 0.979 (p = 0.00) and 0.939 (p = 0.00) at 2hrs, 4hrs and 24 hrs respectively post CBP surgery while ROC analysis of Creatinine had an AUC of 0.775 (p = 0.014), 0.813 (p = 0.005) and 0.892 (p = 0.00) 2hrs, 4hrs and 24 hrs post-surgery.

Conclusion: Cystatin C was found to be an effective predictive biomarker for AKI, as demonstrated by the increased AUC for cystatin C when compared to creatinine at 2hrs, 4hrs and 24hrs post surgery. Incorporating cystatin C into clinical assessment may facilitate earlier intervention, improve risk stratification, and ultimately improve patient outcome.

O-08

The current state of point-of-care ultrasound (POCUS) use in emergency departments in Jamaica's southeast region

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Background: Point-of-care ultrasound (POCUS) supports bedside diagnosis, resuscitation, monitoring, and procedural guidance in emergency care. However, access, training, and implementation vary across Jamaican emergency departments (EDs). This study assessed the availability and utilisation of POCUS and the barriers to its use in 24-hour EDs within Jamaica's Southeast Regional Health Authority. The primary objective was to compare ED physicians' and heads of department's (HODs') reports of access to bedside ultrasound, and secondary objectives assessed POCUS training and barriers to use.

Methods: A cross-sectional, multicentre study was conducted over four months at six public 24-hour EDs. Separate self-administered questionnaires were completed by ED physicians and ED HODs. Eligible participants comprised 172 ED physicians and six HODs. Data were analysed in SPSS using descriptive statistics and are presented as frequencies and percentages.

Results: All six HODs and 119 of 172 eligible ED physicians completed the survey, corresponding to participation rates of 100% and 69.2%, respectively, and an overall participation rate of 70.2% (125/178). POCUS was available in five of the six EDs (83.3%). At sites with POCUS access, 60.0% of HODs and 91.3% of ED physicians reported using it to varying degrees. Focused Assessment with Sonography in Trauma was the most frequently reported application. ED physicians identified inadequate or absent training as the principal barrier, whereas HODs most frequently identified the absence of quality-assurance programmes.

Conclusions: POCUS was available in most participating EDs, but utilisation and implementation were constrained by training gaps and limited quality-assurance systems. These findings support targeted POCUS education, improved equipment access, and formal quality-assurance programmes across the region.

O-09

Anxiolytic effects of an ethyl acetate extract of *Arachis hypogaea* (peanut) testa in mice.

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Background: Anxiety is a common mental health disorder, which is characterized by uncertainty, fear, worry and uneasiness and affects approximately 300 million people worldwide. In Jamaican folklore, the peanut (*Arachis hypogaea*) testa is purported to "calm the nerves" when it is brewed as a tea. However, there is a lack of scientific evidence to support this therapeutic claim. This study investigated the anxiolytic effects of an ethyl acetate extract of *Arachis hypogaea* testa in mice using the Light/Dark Box Test and Elevated Plus Maze.

Methods: Male Swiss albino mice weighing 16 to 25 g were divided into eight (8) groups (n = 6 per group). Animals received intraperitoneal injections of Tween 80 + water (1:9) (10 ml/kg) (normal control), 2 mg/kg diazepam (positive control) and the *Arachis hypogaea* extract at doses of 15, 30, 60, 120, 240 and 480 mg/kg. Each mouse was exposed to the Light/Dark Box and the Elevated Plus Maze for five (5) minutes and recorded via video camera. Anxiolytic activity was indicated by increased time spent in the light compartment of the Light/Dark Box and the open arms of the Elevated Plus Maze. Phytochemical screening and gas chromatography-mass spectrometry (GC-MS) were conducted.

Results: The ethyl acetate extract produced a dose-dependent increase in time spent in the light compartment of the Light/Dark Box and open arms of the Elevated Plus Maze, with the most efficacious dose being 120 mg/kg for both tests. Phytochemical analysis indicated the presence of flavonoids, alkaloids, proteins, tannins and phenols. Compounds including glycerol, hexadecanoic acid and trimethylsilyl ester were also identified by GC-MS.

Conclusion: The ethyl acetate extract of the *Arachis hypogaea* testa showed anxiolytic effects by significantly increasing the time mice spent displaying exploratory behavior in the Light/Dark Box and Elevated Plus Maze; thereby validating the anecdotal use of peanut testa to reduce anxiety.

O-10

Investigation of the effects of an ethyl acetate extract of the *Arachis hypogaea* testa on memory in mice.

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Background: *Arachis hypogaea* (peanut) improves memory but there is little scientific evidence of this effect from the skin (testae). This study investigates effects of an ethyl acetate extract of *Arachis hypogaea* testae on memory using the Novel Object Recognition Test (NORT) and Object Location Test (OLT) in normal mice and mice with impaired memory.
Methods: Swiss albino mice (20–25 g) were administered saline and Tween 80 (10 ml/kg) (vehicle), Donepezil (10 mg/kg) (positive control), and 6 doses of the extract (60–360 mg/kg) (n=6). The most efficacious dose of extract was then tested in mice administered scopolamine (1 mg/kg) to impair memory. Agents were administered intraperitoneally for 11 days, followed by testing in an arena on Day 12. Two identical objects were placed in the arena during the training phase. Twenty minutes later, the OLT was done where one object was moved to test spatial memory. After another 20 minutes, the previously unmoved object was replaced with a novel one to test recognition memory in the NORT. Each test lasted 10 minutes. Percentage preference, representing memory, was calculated using:

$$\frac{\text{Time spent (new or relocated object) x 100}}{\text{Total time}}$$

Compounds of interest were identified using GC-MS.
Results: Mice in the donepezil and extract-treated groups spent significantly more time ($p < 0.05$) than control mice investigating the relocated and novel objects during the OLT and NORT. The extract produced the greatest effect at 180 mg/kg. Scopolamine decreased percentage preference in the OLT and NORT from approximately 59% in normal mice to approximately 44%. The extract (180 mg/kg) alleviated the impact of scopolamine-induced memory impairment as percentage preference was approximately 70% in the OLT and NORT. GC-MS screen revealed compounds including oleic acid which has potential memory-improving effects.
Conclusion: The extract dose-dependently improved spatial memory in the OLT and recognition memory in the NORT.

O-11

Burden, resistance profiles, and susceptibility predictors of extended-spectrum β-lactamase-producing uropathogens at a Jamaican tertiary care hospital: A seven-year retrospective laboratory-based cross-sectional study.

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Background: Globally, extended-spectrum β-lactamase (ESBL)-producing uropathogens significantly decrease empirical treatment options, increasing treatment failure risks and adverse outcomes. This study determined the burden, resistance profiles, and antimicrobial susceptibility predictors of ESBL-producing uropathogens at a Jamaican tertiary-care hospital (JTH).
Methods: In this cross-sectional study (2019–2025), positive urine culture isolates were retrieved from the University of the West Indies Microbiology Department's laboratory information system. Using CLSI M39 A4 guidelines, clinical Enterobacterales isolates were de-duplicated and classified as ESBL-producing Enterobacterales (EPE) or non-ESBL producing multidrug-resistant Enterobacterales (NEPME) including carbapenem resistant organisms. Demographic and microbiological data were analysed utilizing descriptive statistics, χ^2 testing and multivariable binary logistic regression in SPSS. Statistical significance = $p < 0.05$.
Results: Among 5,113 resistant uropathogenic isolates, 1,888 (36.9%) were EPE and 3,225 (63.1%) were NEPME. The overall mean age was 54.2 years [SD, 25.1] and 2666 (52.4%) of isolates with binary sex code (5,089) were from females. EPE isolates were obtained from marginally older patients than those with NEPME (mean, 56.8 vs 52.6). Organism distributions were significantly different between EPE and NEPME (Pearsonχ^2 = 589.34; df=3; $p < 0.001$). EPE isolates comprised greater proportions of *Escherichia coli* (48.9% vs 41.3%) and *Klebsiella* species (39.3% vs 18.5%) compared to NEME. EPE demonstrated significantly lower unadjusted susceptibility to several commonly used empirical antibiotics; ciprofloxacin (25% vs 61.8 %), TMP-SMX (30.3% vs 55.7%), and all tested aminoglycosides (67.4% vs 84.4%); but excellent susceptibility to meropenem was retained (99.1% vs 85.4%) (all $p < 0.01$) when compared to NEPME. NEPME isolates had greater odds of susceptibility to ciprofloxacin (adjusted odds ratio [aOR], 3.687; 95% confidence interval [CI], 3.146–4.321),

TMP-SMX (aOR,1.843; 95%CI, 1.608–2.113), gentamicin (aOR,2.310; 95%CI, 1.961–2.721), and aminoglycosides class-composite (aOR,2.079; 95% CI, 1.790–2.415) compared with EPE isolates (all p <0.001).
Conclusion: Meropenem susceptibility remained preserved in EPE, as preferred agent for serious infections, however increased meropenem resistance in NEPME warrants further study. Enhanced stewardship and molecular surveillance continue to be relevant.

O-12

Sickle cell disease associated with distinct clinical presentation and higher morbidity among children hospitalized for lower respiratory tract infection

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Background: Sickle cell disease (SCD) predisposes children to acute chest syndrome, a major cause of morbidity and mortality, and its baseline haematologic and physiologic features may alter clinical presentation and interpretation of CBC-based markers in children hospitalized for lower respiratory tract infection (LRTI). We aimed to compare clinical presentation, admission laboratory profiles, and hospital outcomes between children with SCD and those with other chronic conditions hospitalized for community-acquired LRTI.
Methods: Retrospective chart review of children aged 29 days – 15 years hospitalized for LRTI at University Hospital of the West Indies, Jamaica, from April 2022 to June 2025. Eighty-six (86) children with at least one chronic condition were analyzed, comprising SCD (n = 21, 24.4%) and non-SCD cohorts (n = 65, 75.6%). Categorical variables were compared using Chi-Squared/Fisher's exact test and continuous variables using Mann-Whitney U test; statistical significance set at p <0.05.
Results: Children with SCD more often reported fever (81.0% vs. 47.7%, p = 0.008), vomiting (38.1% vs. 13.8%, p = 0.025), and abdominal pain (28.6% vs. 4.6%, p = 0.006), and less often reported wheezing (0.0% vs. 26.2%, p = 0.009). SCD patients had lower hemoglobin (7.00 vs. 12.10 g/dL, p <0.001), but higher WBC (23.39 vs. 9.67 x 109/L, p <0.001) and absolute neutrophil count (ANC) (10.78 vs. 6.87 x 109/L, p <0.001). All complications occurred in the SCD group (23.8% vs. 0.0%, p <0.001), primarily invasive ventilation. Antibiotic escalation (23.8% vs. 6.2%, p=0.036) and hospital stay >7 days (57.1% vs. 30.8%, p = 0.030) were more frequent in SCD.
Conclusion: Among children with chronic illness hospitalized for LRTI, patients with SCD exhibit different symptom and haematologic profiles likely reflecting baseline physiology. This group warrants cautious interpretation of CBC-based markers and heightened clinical vigilance due to significantly higher rates of complications and escalation of care.

O-13

Insufficient sleep and its association with depressive symptoms, substance use, community violence and physical activity among Jamaican adolescents (15-19 years) and young adults (20-24 years)

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Background: Insufficient sleep among adolescents and young adults (AYAs), has potential to impact mental health and high-risk behaviours. Limited research exists in the Caribbean where the effect of social and community stressors such as violence exposure may compound these effects. This study aims to determine the prevalence of insufficient sleep among adolescents and young adults in Jamaica, assess its association with depressive symptoms and substance use, exploring influence of physical activity and exposure to crime and violence.
Methods: This study utilized secondary data from a national cross-sectional study. Approval was received to use the database, as well as relevant ethical approval. A structured interviewer administered questionnaire assessed sleep, depressive symptoms, substance use, physical activity level and exposure to violence. Bivariate and multivariate logistic regression analyses were performed to identify independent factors associated with depression and substance use.
Results: Mean sleep duration for participants (n=454) was 8.29 (SD 2.16) hours; 24.3% (n=110) respondents reported insufficient sleep (< 8 hours per night): 15–19 years - 29.6%; 20–24 years - 20.5%. Depression was reported by 12.8 % overall, higher among females across both age groups (p <0.01). In adjusted models, female sex (p <0.001) and residents in 'high crime/high safety' neighbourhoods, where residents felt safe, despite high crime rates (p = 0.004) were associated with higher odds of depression. Sufficient sleep was protective among young adults (OR=0.28, p = 0.01). Substance use was reported by 285 participants, more common among males and young adults (20-24 years) (OR=3.07, p = 0.001). Exposure to community violence increased odds of substance use among adolescent females (OR=4.17, p = 0.03). Sleep, depressive symptoms and

physical activity were not independently associated with substance use.

Conclusion: Insufficient sleep among Jamaican AYAs is associated with elevated depressive symptoms and substance use, particularly in contexts of violence exposure. Interventions promoting adequate sleep hygiene, and reduced violence exposure may mitigate interconnected health risks among the youth.

O-14

The prevalence of cognitive impairment and associated risk factors among older adults attending primary care clinics in New Providence, The Bahamas

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Background: Cognitive impairment is a significant public health concern associated with ageing, reduced independence, caregiver burden, and increased healthcare utilization. This study aimed to determine the prevalence of cognitive impairment and its associated risk factors among adults aged 65 years and older attending primary care clinics in New Providence, The Bahamas.

Methods: A cross-sectional study was conducted among 250 older adults aged 65 years and older recruited from four public primary care clinics using a consecutive sampling approach between August 2025 and February 2026. Data were collected using a structured interviewer-administered questionnaire assessing sociodemographic and clinical factors, followed by cognitive assessment using the Montreal Cognitive Assessment (MoCA). Cognitive impairment was defined as a MoCA score ≤23. Data were analyzed using descriptive statistics, chi-square tests, and multivariable logistic regression.

Results: Among 250 participants, 174 (69.6%) were female and 76 (30.4%) were male. The prevalence of cognitive impairment was 74.8% (n = 187). Age (p = 0.013), education (p <0.001), partner status (p = 0.006), employment (p = 0.024), income (p = 0.001), and vascular risk factors (p = 0.041) were significantly associated with cognitive impairment. Increasing age was associated with higher odds of cognitive impairment (OR = 1.10, 95% CI: 1.02–1.19, p = 0.017), while tertiary education (OR = 0.10, 95% CI: 0.01–0.82, p = 0.033) and higher income (OR = 0.20, 95% CI: 0.06–0.67, p = 0.009) were associated with lower odds of cognitive impairment.

Conclusions: Cognitive impairment was highly prevalent among older adults attending primary care clinics in The Bahamas. Increasing age was associated with higher odds of cognitive impairment, while tertiary education and higher income were associated with lower odds. These findings highlight the need for further research and may help inform strategies to support cognitive health among older adults in primary care settings.

O-15

Knowledge, attitudes and practices of parents towards childhood obesity in urban Jamaica

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Background: Childhood obesity remains a global health concern despite the institution of safe food policies at a governmental level. Parents are responsible for many life-forming habits of children. This study assessed parental knowledge, attitudes, and practices related to childhood obesity, examining their associations with parental sociodemographic characteristics. Insight gained may inform effective public health strategies targeting prevention of childhood obesity, thus decreasing the economic burden of non-communicable diseases.

Methods: This was a cross-sectional study, conducted through interviewer-assisted, self-reported questionnaires over a four-month period, -April to July 2026, at two healthcare facilities in urban Jamaica. Participants completed a Knowledge, Attitudes and Practices questionnaire, and sociodemographic module of the Jamaica Health and Lifestyle III Survey. Data was analyzed using Stata version 17. Descriptive statistics summarized frequencies and percentages for categorical variables, means with standard deviations or medians with interquartile ranges for continuous variables, as appropriate. Group comparisons were performed using the Mann-Whitney U and Kruskal-Wallis tests, while associations between categorical variables were assessed using Pearson's chi-square test.

Results: Seventy-two caregivers participated, 93.1% female and the majority mothers (81.9%). Overall, 91.7% demonstrated good knowledge, 88.9% had favourable attitudes towards childhood obesity, and 52.8% reported healthy practices. Caregivers showed high awareness of obesity-related risk factors and complications and recognized the importance of diet and physical activity. Practice gaps were identified - excessive screen time, television viewing during meals and low fruit and vegetable consumption. Although 75% of caregivers correctly identified obesity in their child, one-quarter underestimated their child's nutritional status. No significant associations were observed between caregiver sociodemographic characteristics and attitude or practice scores. However, higher socioeconomic status was independently associated with good knowledge.

Conclusion: Despite high levels of knowledge and favourable attitudes, healthy practices remained suboptimal, demonstrating a knowledge-practice gap. Family-centered interventions should prioritize parental behaviour change and improving parental recognition of unhealthy weight to support effective childhood obesity prevention.

POSTER ABSTRACTS

P-01

Anticonvulsant activity of ethanol stem bark extract of *Blighia sapida* in mice.

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Background: *Blighia sapida* (Jamaican ackee) is traditionally used to treat epilepsy, but scientific evidence of its therapeutic effects remains limited. This study evaluated the anticonvulsant activity, gamma-aminobutyric acid type A (GABAA) receptor involvement, acute toxicity, and phytochemical composition of the ethanol stem bark extract (BSSE).

Methods: Swiss albino mice (18–25 g; n = 6) received BSSE (250, 500 and 1000 mg/kg, i.p.), diazepam (3 mg/kg, i.p.) or 10% Tween 80 (10 ml/kg, i.p.). Pentylenetetrazole (PTZ) (90 mg/kg, i.p.) was administered thirty minutes after test agents to induce seizures. Flumazenil (2 mg/kg, i.p.), the benzodiazepine receptor antagonist, was administered 5 minutes before the extract or diazepam to investigate GABAA receptor involvement. Acute toxicity was evaluated using the Miller-Tainter method. Major phytochemicals were identified by GC-MS analysis. Data were analysed using SPSS software version 25 followed by one-way ANOVA with Tukey's post hoc test. Significance was accepted as $p < 0.05$.

Results: Diazepam, the positive control, and BSSE (500 mg/kg) significantly reduced seizure duration and increased seizure latency ($p < 0.05$) when compared with the PTZ control. Flumazenil inhibited the extract's ability to reduce seizure duration but did not affect seizure latency, suggesting partial involvement of GABAergic mechanisms. No mortality occurred at doses up to 3200 mg/kg ($LD_{50} > 3200$ mg/kg) in the acute toxicity assessment. GC-MS analysis identified glycerol, palmitic acid, oleic acid and linoleic acid as major constituents.

Conclusion: The *Blighia sapida* ethanol stem bark extract (500 mg/kg) exhibited significant anticonvulsant activity in the PTZ-induced seizure model, mediated partially via the GABAergic system. The pharmacological effects and favourable safety profile of the extract support further analysis to identify the bioactive component.

P-02

Caregiver beliefs and pharmacotherapy in children with autism spectrum disorder in a resource limited setting.

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Background: Autism spectrum disorder (ASD) is a neurodevelopmental disorder associated with behavioural comorbidities that may require pharmacological intervention. There is limited data on prescribing patterns, medication beliefs, and adherence in the Caribbean. This study described the co-morbidities and medication use among children with ASD at Jamaica's sole developmental clinic. Caregiver's medication beliefs and adherence were determined.

Methods: De-identified retrospective data were extracted from the medical records of children with ASD. Standardized questionnaires were administered {Beliefs about Medications Questionnaire- Specific (BMQ-specific), Medication Adherence Report Scale (MARS), Autism Spectrum Knowledge Scale General (ASKSG)} to participating parents. Descriptive statistics, multivariable linear and logistic regression analyses were performed using Stata 19 (statistical significance accepted at $p < 0.05$)

Results: There were 433 medical files reviewed (76.9% males, 23.1% females), mean age was 6.5 (SD ± 3.1) years. Male and female parental ages differed significantly ($p < 0.001$). Eighty-seven percent of children had at least 1 comorbidity; most common were global developmental delay (44.1%); intellectual disability (31.0%) and attention deficit hyperactivity disorder (22.4%). Prescribing rates ranged from 4.4% (2022) to 19.8% (2024); 15.7% represented scripts for psychotropics. Psychotropic scripts increased from 7.4% (2022) to 23.0% (2024) ($p = 0.002$). Adverse effects, (sedation), occurred in 15.0%. Sixty-eight parents were interviewed. Educational levels differed significantly between mothers and fathers ($p = 0.034$). Concerns (86.8%) outweighed perceived necessity of medication. Indifference (32.4%) and scepticism (25%) were common attitudinal profiles. Fifty percent of parents were adherent in administering medication. Adherence was higher in parents with greater knowledge of ASD but the difference did not achieve statistical significance ($p = .054$). There was no significant association between parental beliefs about medication and child and caregiver demographics.

Conclusion: Prescribing rates of psychotropics are increasing in use. There are greater parental concerns about medication use than belief in their necessity and only half of parents were adherent. Education regarding use and adherence of medication must be increased. Reasons for non-compliance must be explored.

P-03

Investigating the need for pharmacist-led therapeutic drug monitoring of nephrotoxic antibiotics at The University Hospital of the West Indies

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Background: Gentamicin, vancomycin, and amikacin are effective but potentially nephrotoxic antibiotics requiring careful monitoring to minimize toxicity while maintaining therapeutic efficacy. Therapeutic drug monitoring (TDM) for these antibiotics is not routinely available at the University Hospital of the West Indies (UHWI), and their utilization, associated clinical outcomes, and prevalence of nephrotoxicity have not been comprehensively evaluated. This study evaluated antibiotic use, clinical outcomes, and nephrotoxicity among adult inpatients receiving these antibiotics.

Methods: A retrospective observational study was conducted using inpatient medical records for admissions between December/1/2025-May/31/2026. Adult patients receiving intravenous gentamicin, vancomycin, or amikacin for ≥48 hours were included. Nephrotoxicity was defined according to the Risk, Injury, Failure, Loss of Kidney Function, and End-stage Kidney Disease (RIFLE) criteria as a peak serum creatinine concentration ≥1.5 times baseline. Data were analyzed using descriptive statistics, the Mann–Whitney U test, Pearson's chi-square test, and Fisher's exact test, with $p < 0.05$ considered statistically significant. One hundred and thirteen patients met the inclusion criteria. However, twenty-four patients (21.2%) could not be classified because of insufficient serum creatinine data.

Results: Gentamicin was the most frequently prescribed antibiotic (53/113; 46.9%), followed by vancomycin (47/113; 41.6%) and amikacin (13/113; 11.5%). Treatment success (defined as resolution of documented infection without evidence of persistent clinical or microbiological failure) occurred in 70/103(68.0%) patients, while 17/113 (15.0%) died during hospitalization. Nephrotoxicity was assessable in 89 patients and occurred in 22 (24.7%), with no significant difference between antibiotic groups ($p = 0.573$). Patients with nephrotoxicity had significantly longer hospital stays (median 55 vs 26 days; $p = 0.014$) and higher in-hospital mortality (31.8% vs 11.9%; $p = 0.047$).

Conclusions: Approximately one quarter of evaluable patients developed nephrotoxicity, which was associated with prolonged hospitalization and higher in-hospital mortality. These findings, together with incomplete renal-function monitoring and the absence of routine TDM at UHWI, support prospective evaluation of a standardized pharmacist-led TDM service.

P-04

Knowledge, attitudes, and behaviour of paediatricians in Jamaica regarding paediatric oral health

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Background: Paediatricians are often in a more distinctive position than dentists to aid in the prevention and treatment of oral health issues in children. This study aims to evaluate the knowledge, attitudes, and behaviours of paediatricians in Jamaica concerning paediatric oral health and will report on preliminary findings of the ongoing study. It also focuses on identifying any significant associations between their level of knowledge and attitudes and their behaviours towards paediatric oral health.

Methods: A knowledge, attitude, and behaviour model was used to perform a quantitative, cross-sectional study using a 40-item, self-administered online questionnaire. Data were collected and stored using Google forms and Microsoft excel software. Statistical analysis was done using SPSS Version 30. Descriptive statistics were performed and Fisher's exact test was employed to determine the relationship between categorical variables. The level of statistical significance was set at $p \leq 0.05$.

Results: The preliminary response rate is 15% (12/80). The majority (91.7%) of respondents were females; most (67%) were in age groups 50 years and over. The mean scores were knowledge 7.3 ± 2.094 (range 0-10), attitude 4.2 ± 0.3 (range 1–5) and behaviour 3.3 ± 0.5 (range 1–5). Statistical analysis found no significant associations between the knowledge and attitudes of participants and their behaviour, $p > 0.05$.

Conclusion: Initial results suggest adequate knowledge, positive attitudes and neutral behaviours. Final results may provide a deeper insight into the relationship between the knowledge, attitudes and behaviours of paediatricians regarding paediatric oral health. While response rates for online surveys are typically lower than 50%, enhancing recruitment efforts, or extending the study period may increase engagement by paediatricians.

P-05

Semicarbazone ligand and its complex's impact on the hematology and biochemistry of type II diabetic rats

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Background: Diabetes mellitus (DM) is a metabolic disorder responsible for a large percentage of global deaths. The primary method of managing DM is through medications. Recently, semicarbazones (SC) and their complexes have gained attention due to their ability to regulate blood glucose by targeting specific enzymes linked to diabetes. This study aims to investigate some of the hematological and biochemical effects of the SC ligand and chromium SC complexes on fructose induced type (II) DM rats.

Methods: To induce type (II) DM, Sprague-Dawley rats were given a single intraperitoneal injection of 40mg/kg streptozotocin two weeks after being supplemented with 10% fructose water. The rats used were 180g to 250g, ages 8 weeks, they were then divided into seven groups according to their metabolic state, (NR, DR, DRG, DRL, DRC, NRL and NRC) diabetic (D) and normal (N), and treatment conditions. Over the course of ten weeks, treatments were given based on assignment. The rats were then sacrificed, collecting blood and other essential organs. Hematological and biochemical analyses were performed on the collected blood serum to evaluate the impact of the compounds on the rats.

Results: Significant increases in the White Blood Count (WBC) could be seen between the ligand treated normal rats (NRL 5.02 ± 2.24 x10e9 cells/L), chromium treated diabetic groups (DRC 1.65 ± 0.83 x10e9 cells/L; $p = 0.0234$) and ligand treated diabetic rats (DRL 2.09 ± 1.73 x10e9 cells/L; $p = 0.0028$). No significant changes were seen in the red blood cell count (RBC) and hematocrit levels across all groups. Significant decreases were seen in the mean platelet volume (MPV) among the DR (8.60 ± 0.63 fL), DRL (8.38 ± 0. 62 fL), DRC (8.300 ± 0.76 fL) groups vs NRL (7.25 ± 0.16 fL; $p= 0.0006$, $p = 0.0029$, $p = 0.0043$, respectively), and DR, DRL, DRC vs NRC (7.30 ± 0.12 fL) groups ($p = 0.0014$, $p = 0.0067$, $p = 0.0102$, respectively). There was no significant difference observed in the serum albumin with the exception of the DRL (12.57 ± 1.90 g/L) group which was statistically lower than NR (15.75 ± 1.75 g/L; $p = 0.0400$). For the average serum Aspartate transferase there was a significant difference observed between DRL (548.8 ± 43.1 U/L) and NRL (171 ± 6.52 U/L; $p = 0.0391$). The average serum creatinine there were not significant difference among all groups.

Conclusion: Both diabetic and non-diabetic rats can have their biochemical and hematological parameters altered by treatment with semi-carbazone complexes. To completely understand how semi-carbazone and its chromium complexes can affect biochemical and hematological processes in a diabetic state, histopathological analysis and other analyses are required

P-06

Health seeking behaviour patterns in adolescent males ages 16 to 19 years in Kingston, Jamaica: a qualitative approach

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Background: Males exhibit less health seeking behaviours than females. Adolescent males are more likely to engage in risky behaviours but are less likely to seek health care resulting in poorer health outcomes. Adolescents in rural and urban areas exhibit similar concerns when seeking healthcare.

Methods: This qualitative study utilized focus group discussions (FGD) and in-depth interviews to gather adolescent males' perspectives and lived experiences regarding health-seeking behaviours. After receiving ethical approval and approval from the Ministry of Education, participants were recruited from grades 11–13 at 4 conveniently selected high schools in Kingston, Jamaica. Participants completed a 5-question anonymous screening questionnaire to determine demographics and exposure to the health system and used aliases to ensure confidentiality. Interviews and FGDs were audio-recorded and transcribed verbatim. All data were securely stored. Data were analysed using thematic analysis to identify recurring themes.

Results: Seven (7) focus groups of 8–12 adolescents and 8 individual in-depth interviews were conducted using a question guide. Health seeking behavior was influenced by the perceived severity of illness and physical symptoms. Fear of judgement and stigma discouraged health seeking while their desire for health information and persistence of symptoms or perceived serious illness drives it. Participants identified barriers such as lack of parental support, lack of patient confidentiality, fear of anticipated outcomes, lack of time and overcrowding. Conversely, parental and family support facilitates health seeking. Participants suggested that health seeking behaviour could be improved through increasing health awareness and information and improving the health facilities and health staff.

Conclusion: Factors influencing health seeking behavior in adolescent males are complex, including intrinsic and external environmental factors. Aspects of health care services were identified that are amenable to improvement to enhance male adolescent health seeking behaviours, and to provide effective and appropriate gender specific health education and services.

P-07

Invisible casualties: an overlooked crisis of psychological morbidity amongst caregivers of children with autism spectrum disorder in Jamaica.

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Background: Caregivers of children with autism spectrum disorder (CASD) face unique and sustained stressors that increase their vulnerability to mental health difficulties. There are currently no studies highlighting the experiences or challenges of caregivers of children with ASD in the Caribbean. This study compared the prevalence and factors associated with depression, anxiety, and parental burnout among C-ASD versus caregivers of children with no developmental concerns (C-NDC) at a single center in Jamaica
Methods: Using a cross-sectional design, interested caregivers were enrolled from two Paediatric outpatient clinics at the University Hospital of the West Indies. Standardized screening tools were administered {Patient Health Questionnaire-9 (PHQ-9), Generalized Anxiety Disorder-7(GAD-7), Parental Burnout Assessment (PBA)} and sociodemographic data were collected via an electronic questionnaire.
Results: Eighty-eight (88) C-ASD and forty-eight (48) C-NDC participated. C-ASD were less likely to be married ($p = 0.001$), living in nuclear homes ($p = .0032$), or have tertiary education ($p = <0.0001$) They were more likely to have lower household income ($p = <0.0001$). C-ASD reported that 36. 3% of the children had co-morbid neuro-developmental conditions and 20.4% had a sibling with a neuro-developmental condition. C-ASD displayed significantly higher rates of depression ($p = 0.0005$), anxiety ($p = 0.0005$) and parental burnout ($p = 0.02$) compared to controls. Univariate analyses identified anxiety and the parental exhaustion domain of the PBA as the strongest factor associated with depressive symptoms, while higher income and maternal employment were protective. In the multivariate analyses, anxiety remained the only independent factor associated with depression ($p = <0.001$) whilst parental burnout ($p = <0.001$) and depression ($p = 0.012$) were independently associated with anxiety.
Conclusion: Jamaican parents of C-ASD children experience higher levels of depression, anxiety and parental burnout compared to parents of C-NDC. Routine mental health screening and targeted support within ASD services, in addition to traditional interventional services, is required. This may prevent chronic psychological morbidity and improve overall family coping mechanisms and wellbeing.

P-08

Short-term outcome of very low birth weight infants at the University Hospital of the West Indies: 2018–2021

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Background: Very low birth weight infants are a subset of low birthweight infants who weigh less than 1500 grams. They represent about 1.4–4.1% of live births globally and contribute to 28% of neonatal mortality. The study aimed to assess the short-term outcome of Very Low Birth Weight infants at the University Hospital of the West Indies for the years 2018 to 2021.
Methods: A retrospective docket review of 200 VLBW neonates born at the UHWI for the period January 1, 2018 to December 21, 2021 was conducted. Descriptive analyses were performed and differences between survivors and non-survivors were determined. Chi square tests were conducted for categorical variables and Student's t-test to analyse continuous variables. Statistical significance was assigned at the level $p < 0.05$.
Results: For the years 2018–2021 there were 200 live born VLBW that were included in the study, representing 3.0% of all live born at the University Hospital of the West Indies with a range of 2.6–3.5% (from 2018–2021). There were 104 (52%) females and 91 (46%) males, mean birthweight (SD) weight of 1083 (252) grams with a range of 510 g to 1490 grams. Fifty-one (25.5%) neonates died prior to 28 days of life representing 53% of all neonatal deaths. Factors associated with mortality included birth weight, gestational age, 1- and 5-minute Apgar score <7, RDS, pneumonia, pulmonary haemorrhage, pneumothorax, intraventricular haemorrhage, hyperglycaemia, culture positive sepsis, maternal hypertension and the need for surfactant therapy, $p < 0.05$. Independent factors associated with mortality included birth weight, gestational age and maternal hypertension, $p < 0.05$. The study had low rates of retinopathy of prematurity, chronic lung disease and intraventricular haemorrhage.
Conclusion: The high mortality of VLBW infants at the UHWI shows that further research is needed to address areas for improvement and implementation of evidence based strategies to improve survival.

P-09

A comparison of the rate of central line associated bloodstream infections pre- and post-implementation of a line care bundle at the intensive care unit, University Hospital of the West Indies (UHWI).

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Background: Central venous catheters are commonly placed in patients admitted to the intensive care unit (ICU) and are associated with significant infection risk. Central line associated blood stream infections (CLABSI) negatively impact patient morbidity and mortality and can be reduced by using care bundles. Local data regarding CLABSI rates is limited and prior to this study, no formal bundle existed at the University Hospital of the West Indies (UHWI). This study aimed to evaluate CLABSI rates before and after implementing a new central line insertion bundle in the ICU, as well as identify specific pathogens and resistance patterns.
Methods: This study was a three-phase project targeting patients who were admitted to the ICU at the UHWI who had central lines inserted. The pre-bundle CLABSI rate was determined via a single centre cross sectional survey conducted retrospectively over eight months. Staff training was done over three weeks, followed by the implementation of the new catheter insertion bundle and subsequently, an eight-month prospective survey was conducted to determine post bundle CLABSI rates.
Results: There was an increase in the CLABSI rate from 11.5 pre- bundle implementation to 15.9 per 1000 catheter days post-bundle. The main organisms responsible were Gram-negative bacteria, namely *Acinetobacter*, *Klebsiella* and *Pseudomonas* species. Multi-drug resistant organisms were found in 64% of the isolates pre-intervention and 41% post-intervention. ICU mortality rates were not significantly different between those with and without CLABSI, but development of a CLABSI was associated with a longer ICU admission both pre and post intervention ($p = 0.001$).
Conclusions: Implementation of an insertion bundle did not reduce the CLABSI rate in the ICU at the UHWI. The increased incidence may be related to gaps in compliance and the absence of a maintenance bundle. Gram-negative pathogens predominated, and the prevalence of multidrug resistance was high, underscoring the need for improvement in infection-control measures and antimicrobial stewardship.

P-10

Attitudes of physicians and nurses towards suicide prevention at the University Hospital of the West Indies Emergency Department and Psychiatric Service.

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Background: Suicide is a preventable cause of death worldwide. Healthcare workers' attitudes impact the efficacy of interventions in this patient group. This study aims to investigate the attitudes towards suicide prevention (ATSP) of physicians and nurses working at the UHWI Emergency department (ED) and Psychiatric Department (PD) using the 'ATSP Scale'.
Methods: A census of nurses and physicians working in the ED and PD at the UHWI during the period May 2025 to August 2025 was conducted. A validated 14-item Attitudes to Suicide Prevention (ATSP) Scale was administered to study participants. Higher scores reflect more negative ATSP. The Statistical Package for the Social Sciences (SPSS) was used for frequency analysis to describe the sample; independent samples t-test, ANOVA and Pearson's chi-square to determine associations between attitude scores and demographic characteristics; and linear regression models to determine directional associations between demographic characteristics and attitude scores. P-value for significance was $p < 0.05$
Results: There were 209 study participants consisting of 162 (77.5%) ED staff, 163 (78.7%) females and 137 (65.9%) nurses. The overwhelming majority of doctors in the ED (89%) and all of the ED nurses, PD nurses, and PD doctors reported perceived benefit of further training geared towards managing suicidal patients. PD staff had significantly lower (more positive) ATSP (mean 29.9 vs 33.5, $p = 0.003$).
Conclusion: Most participants reported a desire for additional suicide prevention training, indicating a strong perceived clinical value of training in this domain. Difference in clinical specialties was the strongest factor associated with attitude, highlighting the need for targeted training in emergency medicine.

P-11

Atypical presentation of acute coronary syndrome in geriatric patients in an Emergency Department in Jamaica

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Background: Persons aged 60 years and older account for a significant percentage of patients presenting to the emergency department and they have a higher probability of presenting with an atypical manifestation of illness. The burden of cardiovascular disease among Jamaicans is high and as the population continues to age, emergency physicians will increasingly encounter elderly patients presenting with acute coronary syndrome. This project sought to determine the prevalence and clinical outcomes of elderly patients aged 60 years and older presenting to a Jamaican emergency department with an atypical presentation of acute coronary syndrome.
Methods: A cross-sectional study was conducted using data obtained from the Hospital Information Management Systems of the University Hospital of the West Indies over the period January 1 to June 30, 2025. Atypical symptoms included syncope, shortness of breath, vomiting and dizziness without typical chest pain. Data extracted include age, gender, type of presentation, co-morbidities, diagnosis, intervention and clinical outcome. Statistical analyses were performed using SPSS version 29.
Results: A total of 17659 persons presented to the emergency department during the study period and a study sample of 107 was pre-determined. Patients 60 years and older accounted for 25.53% (4509) of registrants, with a female predominance of 60 (56.07%) and mean age of 70.75 ± 8.37 years. A quarter (24.30%) of participants had an atypical presentation and all were admitted with one case dying while in the emergency department. No statistically significant association was observed between age and presentation type ($p = 0.803$).
Conclusion: Atypical presentation of acute coronary syndrome is high among elderly patients presenting to the emergency department of the University Hospital of the West Indies. These findings underscore the need for geriatric specific interventions and modifications to be made to alleviate the burden on the emergency department and improve patient outcome. The results are of epidemiological significance to Jamaica and the wider Caribbean and provide a framework for future research in this area. As all these patients tend to be admitted and are frequently housed within the emergency department, the data obtained may be useful in implementing geriatric specific interventions to improve patient outcome.

P-12
Role of point-of-care ultrasound in penetrating cardiac injury.

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Background: Penetrating cardiac injuries represent rare yet highly lethal forms of thoracic trauma that necessitates rapid recognition and intervention to improve survival outcomes. Clinical diagnosis is often challenging, as patients may initially present haemodynamically stable and classical signs of cardiac tamponade are frequently absent. Point-of-care ultrasound (POCUS) serves as a critical adjunct in the early detection of occult cardiac injury and may enable timely intervention.
Methods/Case Report: A 49-year-old male presented to the Spanish Town Hospital approximately 45 minutes after sustaining a single stab wound to the cardiac box. Extended Focused Assessment with Sonography in Trauma (E-FAST) was performed during the initial evaluation and identified a hemopericardium. Serial echocardiographic monitoring revealed progression to cardiac tamponade despite the absence of classical clinical signs. Ultrasound-guided pericardiocentesis was promptly undertaken as a temporising measure while the patient was prepared for operative management. However, only 2 cc of blood was aspirated. Emergency thoracotomy revealed 200 cc of clotted blood within the pericardium and a right ventricular incision, which was successfully repaired. The patient experienced an uneventful recovery and was discharged home six days later.
Conclusion: This case highlights the essential role of POCUS in early recognition and monitoring of penetrating cardiac injuries, particularly in resource-limited settings. It further demonstrates that reliance on clinical examination findings for cardiac tamponade is limited and unreliable. Additionally, this case illustrates the limitations of pericardiocentesis in trauma when clotted hemopericardium is present.

P-13
The clinical significance of frailty in patients admitted to the Intensive Care Unit (ICU) at a tertiary centre in Jamaica

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Background: Frailty is a state of increased physiological vulnerability characterized by diminished reserve across multiple organ systems. In critically ill populations, frailty is widely recognised as predicting adverse outcomes, yet limited data exist from low- and middle-income countries. We determined the prevalence and clinical significance of frailty in patients admitted to a Caribbean ICU.
Methods: Retrospective cross-sectional study of patients ≥50 years admitted to the Intensive Care Unit at University Hospital of the West Indies (January 2024–April 2025). Frailty was assessed using the modified Frailty Index-11 (mFI-11) at admission and discharge. Primary outcome: frailty prevalence. Secondary outcomes: associations

between frailty and 30-day mortality, length of hospital and ICU stay, and incidence/occurrence of acute kidney injury (AKI).

Results: Of 246 eligible patients, 200 were included (mean age 65 ± 14 years; 53% male). Frailty prevalence was 70% at admission (140/200) and 73% at discharge (111/152 survivors). In contrast to published literature, frailty showed no significant association with mortality (frail 22% vs. fit 28%; $p = 0.4$), length of ICU stay (5 days in both groups; $p = 0.4$), length of hospital stay (frail 16 vs. fit 20 days; $p = 0.5$), or AKI incidence (frail 51% vs. fit 41%; $p = 0.2$). Notably, in-hospital mortality was higher in fit patients (28%) compared to frail patients (22%), though not statistically significant.

Conclusions: Frailty prevalence in this ICU cohort was notably high at 70%, consistent with findings that ICU admission accelerates frailty. However, unlike international literature, frailty was not independently associated with mortality or increased resource utilization, suggesting that acute illness severity may be a more dominant risk factor for outcomes, than baseline frailty burden in this Caribbean population.

P-14

Morel-Lavallée lesion of the proximal leg following low-energy blunt trauma: A Case Report

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Background: Morel-Lavallée lesions are uncommon closed degloving injuries caused by shearing forces that separate subcutaneous tissues from the underlying fascia, disrupting vascular and lymphatic channels and producing a hemolymphatic collection. They are typically associated with high-energy trauma and may be missed initially. We report a delayed Morel-Lavallée lesion following low-energy blunt trauma, highlighting its clinical recognition and management analogues to a previous case 17 years ago.

Methods/Case Report: A 59-year-old Jamaican woman presented after her right leg was compressed between the bumper of a slowly moving vehicle and a concrete wall. She reported stinging pain but remained ambulatory. Examination revealed only mild swelling and tenderness over the superomedial proximal leg, with intact neurovascular function and normal knee movement. Radiographs demonstrated no fracture, and she was discharged with analgesia and advice. Three weeks later, she returned for care with a 14 × 7 cm boggy, fluctuant swelling over the medial proximal leg, associated with warmth, erythema, tenderness and pitting edema. Gentle percussion produced a striking ripple-like fluid wave. The clinical phenomenon was documented on video .Ultrasonography demonstrated an avascular subcutaneous collection extending from the medial knee into the anteromedial leg, measuring 21 × 14 × 2.8 cm, with an estimated volume of 428 mL and lace-like reticular internal echoes. A Morel-Lavallée lesion was diagnosed. Ultrasound-guided aspiration yielded 120 mL of serosanguineous fluid. There was no recurrence during one year of follow-up.

Conclusion: Morel-Lavallée lesions may follow apparently minor trauma and present weeks after an initially reassuring assessment. Progressive fluctuant swelling following a shearing mechanism should raise clinical suspicion despite normal radiographs. Recognition of characteristic examination findings, supported by ultrasonography, can facilitate timely diagnosis and management.

P-15

A systematic review of case reports involving SSRI and SNRI associated extrapyramidal symptoms (2015–2025).

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Background: Extrapyramidal symptoms (EPS) are a category of medication-induced movement disorders, primarily caused by antipsychotics. The main objective was to explore case reports involving Selective Serotonin Reuptake Inhibitor (SSRI) and Serotonin and Norepinephrine Reuptake Inhibitor (SNRI) associated EPS published from January 1, 2015, to December 31, 2025.

Methods: Literature search was conducted using PubMed (MEDLINE) and Web of Science, utilizing key terms related to antidepressants and EPS to identify case reports available for free in English. The Joanna Briggs Institute (JBI) Critical Appraisal Checklist for Case Reports and Case Series was used to assess each study.

Results: Nineteen studies comprising 18 case reports and 1 case series with a total of 23 patient cases met inclusion criteria. Among the reported cases, there were 6 cases of bruxism, 5 cases of mixed EPS, 4 cases of akathisia, 3 cases of dyskinesia, 3 cases of dystonia, and 2 cases of parkinsonism. Females accounted for 14 (60.9%) cases while males accounted for 9 (39.1%) cases. Ages ranged from 9 months to 83 years with adults aged 18-64 years old representing the most affected age group. SSRIs predominated, particularly sertraline which was implicated in 10 (43.5%) cases, while SNRIs accounted for 6 (26.1%) cases. EPS onset mostly occurred within 8–30 days of drug initiation or dose escala-

tion. Additionally, 2 cases involved high dose exposure, and 9 cases involved dose escalation. The Naranjo score was reported for only 6 (26%) case reports. All patients showed improvement or symptom resolution following drug discontinuation, dose reduction, or symptomatic treatment.
Conclusions: The most commonly reported EPS subtype and implicated antidepressant were bruxism and sertraline, respectively. Sertraline, despite its safety profile and widespread clinical use should be monitored since it possesses the potential to induce EPS. Lastly, rigorous research efforts are needed to understand the association between certain antidepressants and particular EPS subtypes.

P-16
GLP-1 receptor agonist association with acute pancreatitis: A systematic review

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Background: Glucagon-like peptide-1 receptor agonists (GLP-1 RAs) are widely used in the management of type 2 diabetes mellitus and obesity because of their ability to improve glycemic control, promote weight loss, and reduce cardiovascular risk. Concerns have, however, been raised regarding their potential association with acute pancreatitis. This study aimed to investigate the relationship between GLP-1 receptor agonists and acute pancreatitis through a systematic review of published case reports.
Methods: A systematic search was conducted using PubMed, Web of Science, and Google Scholar databases. A total of 100 records were identified, comprising 30 articles from PubMed, 65 from Web of Science, and 5 from Google Scholar. Following screening and eligibility assessment, 18 studies were included in the qualitative synthesis.
Results: Of the studies included, 10 were case reports of GLP-1 receptor agonist-associated acute pancreatitis. Eight reports utilized adverse drug reaction causality assessment scales, while two did not. Analysis demonstrated that acute pancreatitis associated with GLP-1 receptor agonists is an uncommon adverse drug reaction. Most patients presented with abdominal pain, elevated serum lipase levels, and radiological evidence of pancreatitis. Symptoms generally improved following discontinuation of the suspected medication and supportive management. Potential contributing factors included obesity, type 2 diabetes mellitus, gallstone disease, and concomitant medication use.
Conclusions: Available evidence suggests a possible association between GLP-1 receptor agonists and acute pancreatitis; however, the event appears to be uncommon. Further large-scale studies are required to clarify the nature and strength of this relationship.

P-17
Local anaesthetic-induced methaemoglobinaemia: A systematic review

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Background: Local anaesthetic-induced methemoglobinemia is an uncommon, but serious adverse drug reaction leading to tissue hypoxia. The objectives of this systematic review were to summarize published case reports of local anaesthetic-induced methemoglobinemia, identify patient demographics, implicated anaesthetic agents, risk factors, concomitant drugs, and commonly used treatments.
Methods: A systematic search was conducted in accordance with Cochrane guidelines, using databases PubMed/MEDLINE and Web of Science on May 7, 2026. Terms included "methemoglobinemia" AND "cyanosis" AND "lignocaine OR lidocaine OR benzocaine OR prilocaine OR mepivacaine OR bupivacaine OR ropivacaine" AND "case report" NOT "review."; filtered for English-language only. Extracted data included patient age, sex, local anaesthetic used, onset, duration, concomitant drugs, risk factors, methaemoglobin levels, and treatment.
Results: Forty-eight case reports were included; 52% were females and 21% (10/48) were severe cases. Benzocaine accounted for 52% (25/48) of cases. Risk factors of methemoglobinemia reported were co-administered oxidative agents, such as dapsone, Infancy, glucose-6 phosphate dehydrogenase deficiency and cytochrome-b5 reductase deficiency. Intravenous Methylene blue was the primary treatment, 71% (34/48) with intravenous ascorbic acid as the alternative treatment.
Conclusion: Published case reports suggest that local anaesthetic-induced methemoglobinemia is rare but clinically important, particularly among infants, elderly patients, those with comorbidities, and patients exposed to high doses or multiple oxidative agents. Benzocaine and prilocaine remain the agents most strongly associated with this adverse reaction. Prevention through appropriate dosing, risk assessment, and early recognition of oxygen-resistant cyanosis is essential. Methylene blue remains the main treatment, with ascorbic acid serving as an alternative in selected patients.

P-18
Metoclopramide-induced extrapyramidal symptoms: A rapid review of case reports

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Background: Metoclopramide acts as a dopamine D2 receptor antagonist, and is used in the treatment of disor-

ders such as nausea/vomiting and gastroparesis. This rapid review aimed to describe the published case reports of metoclopramide-induced extrapyramidal symptoms (EPS).
Methods: A systematic literature search was done using PubMed and Web of Science databases on July 27, 2026. The search was conducted with the terms, Metoclopramide AND (akathisia OR dystonia OR parkinsonism OR "tardive dyskinesia" OR "extrapyramidal symptoms" OR EPS) AND "Case Report"; filtered for "English," and "NOT Review." The quality scale used was the Joanna Briggs Institute Critical Appraisal Checklist and data extracted included patient demographics, EPS, EPS scale used and its rating, indication, dosage, EPS time of onset, risk factors, concomitant drugs, treatment and outcome. Data was reported as narrative summaries.
Results: Twenty-two case reports met inclusion criteria; quality assessment rated studies from high (18, 82%) to moderate (4, 18%). Most reports were from the United States of America (7, 32%). Male/Female distribution was 10/12; ages ranged from 6-83 years. Most reported EPS was dystonia, 11 (50%). The most reported indication for metoclopramide was nausea/vomiting (10, 45%). All patients received therapeutic doses of metoclopramide. The time of onset of EPS ranged from 30minutes-8months. Risk factors reported included renal insufficiency and hepatitis A. Most reported concomitant drug used was pantoprazole (3, 14%). For treatment, most reports involved discontinuation of metoclopramide and antihistamine administration (6, 27%). There were no EPS-associated deaths. The frequency of metoclopramide-induced EPS was reported on www.drugs.com as 1-10% (common). The suggested EPS-associated mechanism is Dopamine-2 receptor antagonism at the basal ganglia and nigrostriatal pathway.
Conclusion: The case reports of metoclopramide-induced EPS may provide insights into possible risk factors to facilitate early detection, appropriate treatment, and informed risk-benefit assessment.

P-19
A 10-year retrospective review of adult sudden cardiac death cases at the University Hospital of the West Indies

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Background: Sudden cardiac death (SCD) remains a major cause of cardiovascular mortality worldwide, with limited data describing its population impact in the Caribbean. This study aims to describe the frequency, distribution, and pathological causes of SCD at the University Hospital of the West Indies (UHWI) in Kingston, Jamaica.
Methods: This retrospective study reviewed 180 adult SCD cases identified from 1,206 autopsies performed at UHWI between January 1, 2013, and December 31, 2023. Data collected included demographic variables, provisional and final anatomical diagnoses, coroner's status, pathological cause of death, and cardiovascular risk factors (hypertension, diabetes mellitus, obesity, and smoking). Descriptive statistics were used, and associations were assessed using Pearson's Chi-square, Fisher's exact tests, and one-way ANOVA with post hoc Tukey HSD analysis. Statistical significance was set at $p < 0.05$.
Results: SCD accounted for 7–24% of annual autopsies during the study period, with the highest frequency observed in individuals aged 55–64 years and no overall sex predilection. The most common pathological causes of SCD were coronary artery disease (CAD) (35%), hypertensive heart disease (23%), pulmonary thromboembolism (PTE) (22%), and aortic dissection (11%). Hypertension was significantly associated with hypertensive heart disease ($\chi^2 = 10.464$, $p \leq 0.001$) and cardiomyopathies ($\chi^2 = 8.363$, $p = 0.004$; Fisher's $p = 0.047$). Diabetes mellitus was significantly associated with aortic dissections ($\chi^2 = 4.413$, $p = 0.036$; Fisher's $p = 0.047$) and CAD, after exclusion of PTE cases ($\chi^2 = 8.550$, $p = 0.003$). Obesity showed a significant association with PTE ($\chi^2 = 7.218$, $p = 0.017$; Fisher's $p = 0.017$).
Conclusion: The most common cause of SCD was CAD, predominantly affecting older individuals, similar to that noted internationally. Hypertension, diabetes mellitus, and obesity were significant risk factors, highlighting the importance of targeted screening, enhanced autopsy reporting and a national sudden cardiac death registry.