

Poster Abstracts

P-01

Online Learning Satisfaction During COVID-19 Pandemic Among Offshore Medical Students in Guyana.

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Objective: To investigate how satisfied the students of Rajiv Gandhi University of Science and Technology (RGUST) and Greenheart Medical University (GMU) were with online learning during the pandemic.

Methods: This study adopted a quantitative approach to determine the satisfaction of the medical students. Data was collected via an online questionnaire from 50 undergraduate medical students from two offshore medical universities, namely Rajiv Gandhi University of Science and Technology (RGUST) and Greenheart Medical University (GMU). The questionnaires comprised three sections: (i) biodata, (ii) information related to the university, and (iii) information related to online learning. Students' satisfaction was measured using a 5-point Likert Scale, which was utilized in ten open-ended questions in the online survey which ranged from strongly disagree (1) to strongly agree (5).

Results: Overall, the majority (40%, n=20) of students portrayed a level of dissatisfaction with online learning, with a mean of 3.4 and a standard deviation of 3.01. Several challenges were faced which resulted in demotivation. The most prevalent is poor internet connectivity (42%, n=21) followed by technical difficulties and the absence of practical sessions. Most medical students demonstrated a preference for synchronous online learning, with google classroom and zoom (62%, n=32) being the most frequently used.

Conclusion: Incorporating mixed or blended online learning is recommended for the full effectiveness of online learning in the medical curriculum since both pre-clinical and clinical students opt for more practical sessions.

P-03

The impact of the novel coronavirus infection on Geriatric Hospital patients: A retrospective review

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Objective: To evaluate the prevalence, severity and outcomes of the novel coronavirus infection on patients of a local geriatric hospital

Methods: A retrospective cohort study was conducted. Whole counts and proportions were calculated. Pair-wise, multi-way cross-tabulations, and frequency tables were utilized. T-test, chi-square test and ANOVA test evaluated associations between patient characteristics, diagnosis, severity of disease and treatment.

Results: Approximately 45% of patients belonged to the older old subgroup. The prevalence of COVID-19 at the hospital was 70.4%. The main reason for testing was symptomatology (42%). Amongst the positive patients, most persons had mild disease (27.8 %). Of the positive patients, 39.5% of patients received treatment for 2 weeks to 1 month. COVID-19 was associated with a 39% mortality rate. The persistent symptoms were noted among 14.3% of participants. Fifty percent (50%) of those treated received intravenous fluids and 59.5% received oxygen. There were no statistically significant associations between treatments and survival.

Conclusion: The novel coronavirus had significant effects on residents of a Bahamian long-term care facility. Protocols to ensure decrease prevalence of this disease are a priority.

P-04

A Qualitative Exploration of the Learning Styles of Second Year Medical Sciences Students at the UWI Cave Hill Campus pre-COVID-19

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Objective: To examine the perceptions and experiences of second year medical students with different learning styles, relative to their learning approaches, teaching exposures and preparation for assessments, within the setting of a Caribbean-based medical school.

Methods: This qualitative arm of a mixed-methods study was conducted between November 2018 and February 2019. Focus group discussions (FGDs) elicited the views and lived experiences of a heterogeneous sample of purposively selected Year 2 students who had completed the VARK Learning Styles inventory within the preceding semester. FGDs were audio-recorded, transcribed verbatim and subjected to inductive coding with rapid thematic analysis.

Results: Six participants (F:M= 5:1) between the ages of 18 and 24 years, with a range of learning styles were recruited. Coding, rapid analysis and data reduction yielded four basic themes (“Student preference”, “Lecturing limitations”, “Adaptability”, and “LS theory awareness”). Participants described various methods of taking in information during class and gave perspectives on the types and perceived effectiveness of lecturers’ pedagogical methods. In managing information received in class, regardless of LS students used textbooks mainly to augment perceived gaps in the combination of lecture delivery, slides and their personal notes; interestingly, YouTube videos were used universally. Regarding future application of LS, multi-modal participants because they already employed all four learning modes, anticipated little change as they progressed through medical school.

Conclusion: LS theory and testing appears to be useful for student and teacher awareness but in practice honing students’ adaptability to varying learning settings may be more relevant in helping students achieve desired learning outcomes.

P-05

Perceptions and challenges of nursing faculty towards online learning in Guyana during COVID-19: a qualitative study.

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Objective: To explore the nursing faculty’s perceptions and experiences of online learning during the COVID-19 Pandemic and to identify barriers and facilitators to online nursing education in Guyana.

Methods: Qualitative phenomenological approach was used. Ethical approval and informed consent were obtained. Semi structured interviews with respective Principal tutors of five Schools of Nursing were conducted over zoom and recorded. Each interview lasted for 20 to 30 minutes. Data was transcribed from audio file to text file. Codes were generated using MAXQDA analytics Pro 2022 version 22.2.1.

Results: Thematic analysis led to the following themes and subthemes. The responses were both positive and negative. In the beginning of COVID-19, faculty felt prepared inadequately, as time passed on, they were able to pick up confidence in conducting online teaching. Under perception subthemes were “overall perception”, “face to face Vs online teaching”, “and online assessment” and “curriculum changes”. Challenges subthemes were “Internet connectivity issues”, “Electricity issues”, “distractions” and “Lack of technological skills”. Advantages were “convenience”, “cost effective” and “time efficient”. Faculty expressed the need for training in online teaching methods and how to conduct assessment online.

Conclusion: Curriculum review is highly recommended to suit online mode of delivery. Theory classes can be taught online whereas practical sessions should be done physically at labs, hospital units in small groups.

P-08

A Thematic Analysis of University of Guyana medical students’ perspectives of online learning in the era of COVID-19

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Objective: To use thematic analysis to understand the general perceptions of medical students about the remote eLearning environment; their views about the benefits and challenges and their suggestions for improvement.

Methods: This qualitative study used one focus group involving 8 medical students who had to transition to online learning when the COVID-19 pandemic began. The session occurred via Zoom and was recorded and later transcribed verbatim and analysed for thematic content. Open-ended questions addressed the following aspects of online learning: 1) their overall thoughts 2) the positive aspects 3) any difficulties and 4) suggestions for improvement. Responses were coded and thematic analysis was then used to identify and refine themes.

Results: Themes were as follows: 1) Positive and/or negative perceptions 2) Academic processes; Time Management, Economic Issues 3) Technical, Personal and Educational Problems, Lack of Staff Support 4) Activities to increase motivation; Elimination of Technical and Physical Problems and Recommendations for Successful Outcomes. Students had several suggestions for improvement including

the use of videos; provision of UG ICT hubs on campus and in the outlying regions; training for lecturers on online delivery; avenues for increased interaction with lecturers such as online office hours; and providing orientation modules on time management and keeping focused.

Conclusion: Medical students perceive online learning in a favourable way however, they highlighted several challenges including access to technological resources, inability to focus and lengthy delays for feedback/assistance from lecturers. These issues, in addition to continuous monitoring, will improve the effectiveness of online learning.

P-09

Heterogeneity of SARS-CoV-2 Transmission within Departments at a Tertiary Educational Institution, Grenada, and its implications for control

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Objective: Non-pharmaceutical (physical distancing, masks, hand washing, ventilation, physical barriers, testing with isolation and quarantine for infected individuals and contact tracing, etc.) were coupled with a vaccination mandate to limit transmission of SARS-CoV-2. The aim to limit transmission and maintain low infection rates were important drivers of policy which aimed to limit severe outcomes of SARS-CoV-2 infection.

Methods: This retrospective longitudinal study examine transmission patterns within and between departments at a tertiary education institution in Grenada which enforced a vaccination entry requirement to a closed campus from June 2021 to date. PCR and rapid tests were freely available to all individuals who were allowed access to the campus facility. The null hypothesis assumed that the rate of infection would be the same in all departments adjusted for size. Data from all 48 departments were collected and assessed from August 2020 – December 2022.

Results: A total of 233 (10.7%) out of 2181 individuals tested positive. Adjusting for differences in the sizes of departments, six departments were found to have proportions significantly higher than expected ($p < 0.001$) and accounted for 40% of all positives. In contrast, four departments experienced zero positive test results, which was much lower than the 14 to 15 that would have been expected.

Conclusion: The concentration of positive cases in a few departments, whilst others experienced no cases, reflects inter and intra exposure rate differences related to human behavior and reflects departmental responsibilities. Reduc-

tion of transmission necessitates additional preventative measures for high-risk groups.

P-10

Development of a Joint Regulatory Review Framework for COVID-19 Therapies in the Caribbean: A Practice Paper

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Objective: Objective: To conduct a review of the regulatory environment and stakeholder perspectives towards developing a framework for consultative and/or joint reviews of medicines and vaccines in CARICOM.

Methods: Design and Methods: A SWOT analysis and a risk assessment analysis were undertaken, and supplemented by interviews with focal points of 6 CARICOM countries and with representatives of a Central American mechanism for work-sharing, to explore the regulatory landscape, identify anticipated challenges, and to inform the joint review framework.

Results: Results: Based on the existing verification review process for COVID-19 vaccines, findings of the analyses, and feedback from focal points, the framework was developed as “fit-for-purpose” with three stages of implementation: Process 1 (consultation after CRS Caribbean Regulatory System (CRS) review for COVID-19 medicines and vaccines), Process 2 (Member State request for review and consultation), and Process 3 (work-sharing among Member States for medicines to treat prevalent conditions).

Conclusion: Conclusion: The proposed joint review framework as a staged process of consultations or work-sharing reviews of medicines / vaccines is a welcome initiative. It will require further discussion with Member States, and agreement on participation, harmonization of requirements, adoption of outcomes, and timely market decisions by participating Member States. This approach may be considered by other resource-constrained country groups considering collaborative or work-sharing approaches.

P-11

A survey on the Non-conventional Therapies for COVID-19 in Trinidad

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Objective: To assess the non-conventional therapies used by the residents of Trinidad and Tobago for COVID-19 to attain documentation and records for further pharmaceutical studies and research

Methods: A cross-sectional online survey (using google forms) was conducted throughout Trinidad and Tobago amongst the general population (≥ 18 years) via social media channels (Facebook, Whatsapp, and Instagram) between 20th June to 19th July 2022.

Results: The questionnaire was completed by 57 persons, with 10 persons (17.54%) not being vaccinated, while 47 (82.46%) were vaccinated. Most of our respondents (81%) used both conventional and non-conventional therapies, (12%) used conventional treatment, while (7%) used non-conventional treatment alone. Antibiotics, ivermectins, anti-inflammatories, analgesics, bronchodilators, and cough/flu syrups are the most frequently reported conventional treatments. While non-conventional therapies reported include vitamins, minerals, supplements, and plants and animal products including herbal teas, cloves, lime, honey, caraille, bandia roots, Spanish thyme, CBD oil, liquid chlorophyll, papaya leaves, Echinacea, eucalyptus oil and vervine were documented. In the persons who used conventional therapy (either alone or in combination with non-conventional therapies), 13.21% (7/53) reported side effects, which included severe thirst, headache, nausea, drowsiness, and one case of weight gain. There were no reports of any side effects noted when non-conventional treatment alone was used.

Conclusion: Non-conventional therapies showed promising effects in the management of COVID-19, proper selection, research, and development of some of their bioactive might help in producing better alternatives to conventional therapies for COVID-19.

P-12

Review of the Pathophysiology of the Vasa Vasorum of the pulmonary vessels in Covid19: The major vessels involved in pulmonary thromboembolism in COVID-19.

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Objective: Pulmonary thromboembolism is a major pathological event seen in COVID-19. There were many reports

in medical literature in which the source of pulmonary thromboembolism was indeterminate. Our main objective was to identify the pathophysiology of pulmonary thromboembolism in COVID-19.

Methods: Autopsies were performed on patients who died of COVID-19 and histopathological examination was done on all tissues.

Results: The lung showed among other changes, thrombosis of the vasa vasorum of the large pulmonary vessels. Thrombosis of the vasa interna was also noted. Thromboembolism of the large pulmonary vessels was seen to be originating from the thrombus of the vasa interna in all autopsied cases.

Conclusion: Thromboembolism of the major pulmonary artery arises from thrombosis of the vasa vasorum interna. This is the major pathophysiological process which accounts for the frequent pulmonary thromboembolism seen in COVID-19.

P-13

A Systematic Comparison of COVID-19 Products with Regulatory Endorsement in the Caribbean Community and Major Markets

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Objective: This work was intended to examine the products with regulatory endorsement in major pharmaceutical markets in comparison to the Caribbean Community (CARICOM) for the treatment or prevention of Coronavirus Disease (COVID-19).

Methods: For this analysis, major pharmaceutical markets were represented by the 3 International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use (ICH)-founding entities (European Union, Japan, and the United States). Recommendation by the Caribbean Public Health Agency (CARPHA)-Caribbean Regulatory System (CRS) was selected as the representation of regulatory endorsement in CARICOM. A systematic review of public listings was conducted to quantitate, chronologically assess, and classify COVID-19 vaccines and medicines approved by these ICH-founding entities in comparison to those recommended by the CARPHA-CRS for CARICOM Member States.

Results: Japan approved 17 COVID-19 products; 16 products were approved in the EU and 11 products in the US. In contrast, there were 6 distinct products with CRS recommendations for CARICOM. On average for vaccine products, the CARICOM regulatory endorsement occurred approximately 83 days after the earliest ICH endorsement.

Conclusion: The total number of distinct COVID-19 products with regulatory endorsement in CARICOM represented a reasonable portion of the total number of prod-

ucts approved in ICH countries. Overall, CARPHA-CRS made timely recommendations for CARICOM during the COVID-19 pandemic, signifying its value for preparing the region for future public health emergencies.

P-14

The outcomes of cervical cerclage with antibiotic use at Victoria Jubilee Hospital Jamaica

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Objective: To assess how cervical cerclage with antibiotic use effects maternal and foetal outcomes.

Methods: This study was a retrospective cohort study that analyzed the clinical data of pregnant women who received cervical cerclage at The Victoria Jubilee Hospital, Jamaica between 2010 and 2021. After Ethics approval was obtained, data was extracted from the patients' dockets using a data extraction sheet. Data was analyzed using students T test, chi-square and multivariate logistic regression.

Results: 200 patients with cervical cerclage were analyzed: 100(50%) received antibiotics and 100(50%) did not. There was a significant increase in the latency period in the antibiotic group of 20(+/-5) weeks compared to 17(+/-7) weeks without antibiotics($p<0.005$). The mean gestational age at delivery was improved at 37(+/-3) weeks with antibiotic compared to 34(+/-6) weeks without antibiotics. There was an improved birth weight of 2.89(+/-0.785) with antibiotic use($p<0.05$). The number of admissions to nursery and respiratory distress rates were reduced in the antibiotic group ($p<0.001$). The use of antibiotics reduced the percentage of neonates that died from 20% to 4%($p<0.001$).

Conclusion: The use of antibiotics with cervical cerclage has demonstrated significant improvements in the latency period from cerclage placement to delivery, delivery at term, as well as reductions in preterm births, admissions to nursery and neonatal death.

P-15

Physician Barriers to Obtaining the Sexual Health History of Patients in The Bahamas

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Objective: To determine the frequency of obtaining the sexual health history, and professional and personal barriers among physicians.

Methods: A cross-sectional quantitative study was conducted on physicians practicing at public and private institutions in New Providence, The Bahamas from General Practice, Family Medicine, Internal Medicine, Pediatrics and Obstetrics & Gynecology specialties using an anonymous, self-administered 13-item questionnaire. Statistical analysis was done using SPSS.

Results: A total of 181 physicians participated with 97 (53.9%) of physicians reported taking a sexual health history as "if relevant to the chief complaint", with a strong relationship between medical specialty and frequency (Cramer's V = 0.355, $p<0.001$). The median response for the 5Ps was "often" for most questions except for 5 questions involving sexual partners, sexual practices, past history of STIs, and prevention of pregnancy, where the median response was "sometimes". Professional barriers were reported as lack of time (41.9%), lack of space/privacy (54.2%), and lack of psychosexual counselling (31.1%), with a strong relationship between medical specialty ($p = 0.024$, $p < 0.001$, and $p = 0.004$, respectively). One common personal barrier was reported as sex being a "sensitive subject" in 37 (20.4%) of physicians. The median comfort level with the Transgender patient group was "neutral" and for all other patient groups the median comfort level was "comfortable".

Conclusion: A sexual health history should be done annually, and incorporation of a standardized form can be used at public and private institutions. Further studies are needed to assess responses from physicians practicing on all islands of The Bahamas.

P-16

Characterizing Congenital Heart Disease in Guyana

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Objective: To estimate the birth prevalence of congenital heart disease (CHD) in Guyana based on Georgetown Public Hospital Corporation (GPHC) pediatric presentations and to describe CHD characteristics in children seen.

Methods: All pediatric patients aged 18 and under seen by the GPHC cardiology team were identified using the echocardiography lab online database and paper files. Echocardiographic findings were used to determine the underlying cardiac abnormality. Descriptive analysis was used to characterize CHD abnormalities seen and a retrospective study

design was used to estimate the birth prevalence of CHD in Guyana based on Guyana Programme for Advancement of Cardiac Care (GPACC) GPACC presentations from 2015–2018.

Results: 386 pediatric patients aged 18 or under were included in this study. The birth prevalence of CHD in Guyana was found to be 0.8 per 1,000 live births. Ventricular septal defects were the most common form of CHD (n=107), followed by Atrial Septal Defects (n=107). There were 20.5% of patients who had complex lesions (n=79), with Tetralogy of Fallot being the most common diagnosis within this group. The percentage of patients with simple obstructive lesions was 10.4%, and 4.1% had isolated valvular insufficiency. Surgical intervention was required in 52.1% (n=201) of children. After initial presentation, 29.8% of patients were lost to follow-up.

Conclusion: The calculated birth prevalence was considerably lower than the expected birth prevalence reported for South America in the literature suggesting undiagnosed or unreferred CHD. Obstacles to identification, referral, and management of children with CHD in Guyana need to be addressed with the goal of more complete access to timely intervention and improved outcomes.

P-17

Retrospective Cross-sectional Study of the Incidence rate of Cardiac Malformations in the Pediatric population at Georgetown Public Hospital Corporation using Echocardiography.

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Objective: This study aimed to assess the incidence rate of cardiac malformations by echocardiography in a pediatric population (from 1 day to 12 years) at the echocardiography laboratory of Georgetown Public Hospital Corporation.

Methods: Cardiac malformations were diagnosed using a combination of clinical signs and symptoms and ultrasound/echocardiographic imaging data. A retrospective Cross-sectional study of the incidence rate of cardiac malformations was conducted at the Georgetown Public Hospital Corporation. This design comprised two steps. Firstly, a permission letter with details of the study protocols was issued to the head of both the Research Committee and the Health Science and Education department at Georgetown Public Hospital Corporation to gain permission to access medical records from the echocardiography lab. Then the files were reviewed.

Results: In this study, it was found that the incidence rate of congenital heart malformations is 10.3 per 10,000 live births as diagnosed by echocardiography. Factors such as age, gender, ethnicity, place of residence, and the types of cardiac malformations affected patient outcomes. Males were found to have a higher number of cardiac malformations as compared to females. However, more female patients were diagnosed with multiple cardiac malformations.

Conclusion: The incidence of congenital heart malformations per region was calculated and it was found that region 4 had the highest incidence rate (5.3 per 10 000 children).

P-18

Teenage Pregnancy, its prevalence, and adverse obstetric and perinatal outcomes at New Amsterdam Hospital

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Objective: To determine the prevalence of teenage pregnancy along with the obstetric and perinatal outcomes at New Amsterdam Regional Hospital between the period of May 2019 to May 2021.

Methods: This is a cross-sectional study conducted at the New Amsterdam Regional Hospital. The medical records of teenagers (13 to 19 years old), who delivered at the institution during the period of May 2019 to May 2021 were reviewed. This information was collected using a data collection tool, analyzed and a final report was prepared.

Results: A total of 7234 women gave birth during this period, of which 5.8% (n=417) were teenagers. The age with the highest prevalence was 17 years old (25.4% (n=77)). Most patients had term deliveries as opposed to preterm (76.9 % (n= 233) vs 12.5% (n=38)). A significant number of patients had adverse obstetrical outcomes (98% (n= 297)); the need for an episiotomy (51.4% (n= 156) p = 0.818) and delivery via Cesarean section (14.5% (n=44) p= 0.252) were the most common. One hundred and fifty-four (50.8%) neonates had adverse outcomes with a low APGAR score at 1 minute while low birth weight was the most frequent (13.2% (n=40) p=0.004).

Conclusion: Although the prevalence of adolescent pregnancy in Guyana may be lower than in some countries; it is significant. Adolescent pregnancies are a public health problem associated with considerable adverse obstetrical and perinatal outcomes. Hence there is an urgent need to focus attention on the reproductive health needs of our young women.

P-19

Socioeconomic Predictors for Infant Congenital Heart Disease: A Scoping Review

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Objective: To determine whether socioeconomic status is a predictor for infant congenital heart disease.

Methods: A Scoping Review was conducted using the Joanna Briggs Institute (JBI) guidelines. Multiple databases were searched using a predefined Boolean logic and search criteria. All search results were managed using Zotero - an open source reference management software. Duplicate results were deleted and multiple levels of screening were used to remove any articles that did not meet all of the inclusion criteria. For the articles that met the inclusion criteria, the overall findings were extracted and entered into an Excel Spreadsheet for Narrative Analysis.

Results: Of the 7156 items that were initially returned by the search, 16 were used in the final analysis. Three different approaches to measuring socioeconomic status emerged namely: personal parental factors; environmental factors; and neighbourhood factors. All 16 of the studies demonstrated an inverse relationship between the parental socioeconomic level and the risk of the neonate having congenital heart disease.

Conclusion: Independent of the method used to determine socioeconomic status, there is an inverse relationship between parental socioeconomic status and the risk of a neonate being diagnosed with Congenital Heart Disease.

P-20

Management and examples of rare diseases: the genetic particularities of the Caribbean population

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Objective: To inform the Caribbean population about rare diseases, taking into account the genetic peculiarities of the Caribbean population, and to draw attention to the difficulty of obtaining a diagnosis for these diseases.

Methods: A list of examples of rare diseases in the Caribbean with genetic peculiarities seen from 2003 to 2022 at the Caribbean Center of Reference for Neuromuscular and Neurogenetics, as well as implications and recommendations.

Results: Around 1,75 million people in the Caribbean are estimated to be affected by a rare disease, however, they receive insufficient attention. There is a high prevalence of Huntington's Disease Like 2 and Steinert's disease. A rare form of Amyotrophic Lateral Sclerosis has been found in Martinique. SCA 2 is surprisingly more prevalent than SCA 3. These examples emphasize the significance of investigating the genetic peculiarities of the Caribbean population as they challenge the assumed prevalence and symptomatology of certain diseases. To improve patients' care and inform families about the importance of prevention, diagnostic testing is necessary. Only a few laboratories can perform the required testing for rare genetic diseases.

Conclusion: It has proven crucial to work together to tackle rare diseases within the unique genetic backgrounds of our population, as evidenced by successful examples of collaboration between Caribbean regions. Interested countries are invited to collaborate with Martinique.

P-21

A Qualitative Exploration of Exclusive Breastfeeding: Perspectives of Healthcare and Childcare Providers and Policy Makers in Barbados

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Objective: To explore perspectives of health and childcare providers and policy makers regarding factors influencing exclusive breastfeeding experiences in Barbados.

Methods: An interpretivist qualitative study was conducted (2019-2021) using audio-recorded one-on-one semi-structured interviews via Zoom by three trained female researchers. Breastfeeding mothers and other participants from public, private, and civil society healthcare and childcare sectors were recruited according to the principles of maximum variation. Saturation occurred at the 28th participant. This paper is a preliminary sub-analysis of the views of health and childcare professionals and policy makers. Interview audio was transcribed verbatim, and consistency of coding established using an agreed deductive coding frame. One researcher reviewed all transcripts creating completing rapid analysis summary notes while another researcher coded 50% of transcripts using Atlas ti for data management. Emerging thematic constructs were discussed and differences resolved.

Results: Ten females and one male with healthcare and childcare experience ranging from nine to 39 years, participated in the study. Participants' perspectives identified that nursing mothers framed an inter-related four-phase exclusive breastfeeding experience, which was influenced by multiple factors operating at the four levels of the Socio-

Ecological Model: personal, inter-personal (relationship), community and societal. The dominant emergent theme relevant to each model level, were maternal engagement; inter-personal influences; support mechanisms; and conflicting socio-cultural and policy norms, respectively.

Conclusion: Multiple inter-related socio-ecological factors influence the exclusive breastfeeding experience of mothers in Barbados. A re-invigorated, integrated approach addressing these factors could strengthen existing health system policies and practices to promote exclusive breastfeeding in Barbados.

P-22

An Investigation into the common Demographic, Clinical and Immunological Features of patients diagnosed with Systemic Lupus Erythematosus at Georgetown Public Hospital Corporation

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Objective: To evaluate the demographic, clinical and immunological features among patients diagnosed with Systemic Lupus Erythematosus (SLE) at a GPHC Medical clinic.

Methods: This study was a quantitative, retrospective study which surveyed charts of lupus patients from 2005 to 2020 at the Rheumatology clinic, GPHC. All SLE patients enrolled at GPHC during this time >18 yrs were included. 23 patients met the inclusion criteria and were studied. All data were analyzed using SPSS v 26.

Results: The mean age of SLE patients was 30.3±8.1 years, of which 43.47% were 18-28 years old, 39.13% were 29-39 years and 17.39% ≥ 40 years old. Women (95.65%) accounted for most cases. Indo-Guyanese accounted for 47.8% of cases and both Afro-Guyanese and mixed ethnicity accounting for 26.1%. The most common clinical feature was cutaneous manifestations (91.3%) followed by Arthritis (65.21%). Renal (52.17%), Serositis (47.82%), constitutional (43.47%), hematological (30.43%) and neurological (13.04%) manifestations were seen. All SLE patients had positive ANA, 39.13% also had positive Anti-dsDNA.

Conclusion: This study found that younger females of Indo-Guyanese heritage are most frequently diagnosed with SLE. The results also showed both pathognomonic and rare symptoms are among the clinical manifestations observed. Moreover, incidental findings suggest that there may be the presence of ANA-negative SLE among cases in Guyana; and require further immunological testing to follow up. These findings will suggest the need for more research on SLE and implementation of a robust recording and follow up system for patients with SLE at GPHC medical clinic.

P-23

Parental knowledge, perceptions and practices towards childhood fever in the Emergency Department, Princess Margaret Hospital, The Bahamas

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Objective: To assess the knowledge, attitudes, and effects on management practices towards fever, of parents attending with their febrile child at the Accident and Emergency Department (AED), Princess Margaret Hospital (P.M.H.), Nassau, Bahamas.

Methods: An observational cross-sectional research study was conducted with eligible candidates interviewed during randomly selected computer-generated ED shifts, from August 2011 to February 2012 using a standardized, validated investigator-administered questionnaire. Data collected were analyzed to assess statistical significance and extent of associations.

Results: Three hundred and twenty-six caregivers were surveyed. The correct definition of fever 38.0°C/100.4°F was noted in 40.2% of caregivers. The minimum temperature at which antipyretics would be administered for a fever was 98.6°F. Seizures, infections, and brain damage were the most frequent concerns of caregivers. The most frequent dosing intervals for antipyretics were four hourly, for both acetaminophen and ibuprofen. Median temperature with which a caregiver would call the doctor was 100.4°F, and 100.2°F was the median temperature indicated by caregivers regarding when a child would be taken to the ED.

Conclusion: There continues to be misconceptions towards fever in a child in caregivers attending the ED, which have some influence on practices for fever management, irrespective of educational level. Emergency Department patient education is necessary.

P-24

Characteristics of pregnant women identified as near-miss and factors related to maternal deaths in Saint Lucia: a review of case records

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Objective: To determine factors related to maternal deaths and near-miss cases in Saint Lucia.

Methods: This descriptive study included all maternal deaths from 2006-2015 (n=23), near-miss (n=111) and potential near-miss (n=121) from 2011-2015. Uncomplicated pregnancies for 2015 were used for comparison. Data was analyzed using Chi square, ANOVA, T-tests and Logistic Regression.

Results: 47.8% of maternal deaths were misclassified (absent from the national maternal mortality database). The main causes for misclassification were lack of pregnancy information on death certificates and coding errors. Misclassified deaths occurred at home or non-maternity hospital wards; were postpartum, in early pregnancy or died undelivered. Advanced maternal age and being unemployed, were significantly associated with mortality, $p < 0.05$. Direct maternal deaths predominated, 65%. Embolic events, hypertensive disorders, postpartum haemorrhage (PPH) and ectopic pregnancy, were the main causes of maternal deaths. The 3 main causes of near-miss were hypertensive conditions, PPH and ectopic pregnancies. Cesarean section was 3 times and preterm births 6 times as likely for pregnancies with Severe Maternal Outcomes ($p < 0.001$). Newborn outcomes were best for uncomplicated pregnancies and worsened as the severity of maternal complications increased ($p < 0.001$).

Conclusion: Multi-source methods will improve identification of maternal deaths, especially in settings of low incidence. The source of maternal death data should encompass mortuary records, non-obstetric hospital wards, hospital death registers, along with the Civil Status Registry and Health Department. Practitioners should be trained on maternal death certification and coding. Implementing near-miss surveillance, and health promotion re warning signs in pregnancy would positively impact maternal deaths.

P-25

Physician perspectives on unnecessary clinical care in Trinidad and Tobago

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Objective: To evaluate the attitudes and practices of physicians in Trinidad and Tobago towards unnecessary clinical care.

Methods: An online cross sectional study design and convenience sampling was used to collect data. Attitudes towards unnecessary care and awareness of the international Choosing Wisely campaign were assessed. A descriptive

analysis was performed using the Statistical Package for the Social Sciences, Version 23 (SPSS 23 for Windows).

Results: Data from 218 physicians were analysed. Most participants worked in Internal Medicine (n=59, 27.1%) and the majority of participants were junior doctors (n=147, 67.4%). Most participants (n=97, 44.1%) said they rarely recommended low value care to patients while 51.8% (n=113) said their colleagues sometimes recommended low value care. Almost all participants (n=210, 97.1%) were interested in learning more about evidence-based recommendations that could address when a test/procedure is unnecessary. Approximately 40% (n=87) participants agreed that unnecessary tests harmed the environment. Reasons for ordering unnecessary tests included because it was an order from the senior doctor in the specialty or the admitting doctor requested the test (68.3%, n=149), inadequate information (61.5%, n=134), difficulty accessing prior medical records (126, n=57.8) and fear of litigation (57.3%, n=125). Strategies to reduce unnecessary care were training (92.2%, n=201), ease of access to external records (72.9%, n=159), clinical pathways (64.2%, n=140) and educational materials for patients (64.2%, n=140)

Conclusion: Unnecessary care is an area of concern in Trinidad and Tobago. Identifying areas of overuse and developing targeted plans to reduce unnecessary care are important next steps.

P-26

The Knowledge, Attitude and Practices of Antibiotic Use Amongst Patients at Agape Family Medicine Clinic in Nassau, Bahamas

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Objective: To assess the knowledge, attitudes, and practices with relation to antibiotic use in patients who attend the Agape Family Medicine Clinic in New Providence, Bahamas.

Methods: A cross-sectional study was conducted on individuals attending Agape Family Medicine Clinic. One hundred and eighty-three English-speaking individuals, 18 years of age or older with previous use of antibiotics were invited to complete a self-administered 47-item questionnaire. Data was collected from February 1, 2020 - July 31, 2020 and analyzed using the IBM SPSS statistical analysis software.

Results: There was a 13% refusal rate with 161 persons agreeing to participate in the study. More than half (54.4%) of the participants believed that antibiotics reduced recovery time of most coughs and colds and 44.3% thought they were effective against viruses. Overall, poor knowledge was

demonstrated. However, more than half (57.8%) had positive attitudes; 88.2% preferred not to self-medicate. Most participants (92.5%) had good practices; 70.0% completed their last antibiotic course. However, a small percentage (6.3%) of respondents reported self-medication, half of which obtained the antibiotic used from a pharmacy.

Conclusion: There is a significant deficit in the knowledge of antibiotic use among patients attending Agape Family Medicine clinic. Overall, good attitudes and practices were observed however, improvements can be made. Physicians must practice evidence-based medicine and explain treatment decisions to their patients. Public educational campaigns geared towards antibiotic use and misuse are also critical. Furthermore, laws and regulations concerning the distribution of antibiotics by pharmacies must be implemented and enforced.

P-28

Factors Influencing Knowledge on the Completion of Treatment Among Tuberculosis Patients Under Directly Observed Treatment Strategy (Dots) in A Selected Health Facility, The Bahamas.

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Objective: To determine the factors influencing completion of DOTS in Tuberculosis treatment in the Bahamas

Methods: A quantitative, descriptive cross-sectional survey. Tuberculosis patients aged 18 years and above were considered regardless of the site or the smear status of their TB. Sample size was 62. Data analysis and interpretation done using the statistical package for the social sciences software (SPSS version 22), through the exploration and calculation of descriptive (frequencies, percentages, means, standard deviations and inferential (Anova) statistical methods. Statistical significance was determined to be a p value of 0.05.

Results: The mean age of the respondents, 39.9 years, SD 11.65, and 73% of them were men. 63 percent of participants, 78% of whom were citizens of the Bahamas, reported having no annual income. Seventy-eight percent (31) of the participants said they had insufficient food and drink while they were unwell. More than half of the participants in the survey reported being on at least one pharmaceutical regi-

men, although 36% said they were not actively taking any of the prescription medications.

Conclusion: Less than a third were noncompliant with DOTS, this was influenced by factors such as, annual income, no family support, marital status, employment status and educational level.

P-29

Establishment of an adolescent HIV clinic, retention in care and outcomes of HIV-infected adolescents and youth

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Objective: To describe the model used to establish an adolescent HIV clinic and describe retention, adult transition, and viral suppression of HIV-infected 10-19 year olds enrolled in care

Methods: This is a retrospective cohort study of HIV-infected adolescents aged 10-19 years enrolled in an adolescent HIV clinic from 2014- 2019. Data entered on an on-site database identified demographic characteristics, viral loads, clinic visits, retention, lost-to-follow, death, and outcomes after the transition to adult care as of December 2022. Pregnancies, deliveries, and educational or employment status were summarized.

Results: The adolescent clinic model that was used was a sequential transition. This is an adolescent clinic covering the transitional periods: paediatrics to adolescence and adolescence to youth held in the adult clinic setting with integrated support. Among 86 HIV-infected adolescents and youth, 64 (75%) were in care, 3 (4%) were lost to follow, 11(13%) were transferred, and 8(8%) died. 60 (94%) were perinatally infected. Among those in care, 8% were 10-14, 38 % were 15-19, 43 % were 20-24 and 11% were older than 25 years old. 60% were in adult care. Unemployment was 12%. Virologic suppression was 69 %. There were 23 offspring of 15 HIV-infected youth. Two perinatally infected parents had 2 HIV-infected children.

Conclusion: A sequential transition model resulted in high retention in care of HIV-infected adolescents, 3-8 years after enrolment. Vigilant integrated support must be maintained until self-management is established to help maintain viral suppression into adulthood. More adolescent-trained practitioners are needed in the public sector.

P-30

Epidemiology and distribution pattern of cutaneous Leishmaniasis in Guyana- a surveillance study

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Objective: The goal of this study was to identify the epidemiologic pattern and the degree of distribution of Leishmania species in Guyana.

Methods: A retrospective study was conducted over five years (2017- 2021) examining the epidemiologic pattern and the degree of distribution within the country, using heat maps. Data was collected from different testing sites across the country such as Vector Control Services in Georgetown, Lethem hospital, and Bartica hospital. All 23 positive microscopy slides preserved for cutaneous leishmaniasis were sent for species identification with support from PAHO.

Results: This study provided a correlation between socio-demographic characteristics of cutaneous Leishmaniasis in Guyana. The study identified the disease predominantly affects the male gender, the Agro-Guyanese ethnic group, and between the ages of 34, who live or work in the hinterland region, particularly regions 7, 9, and 10. Notably, males with mining occupations or in the army stationed in the hinterland regions were at the highest risk due to significant exposure to the bite of sandflies that are widespread in these regions.

Conclusion: This study presented a comprehensive depiction of how Leishmania species are distributed across Guyana. Molecular diagnosis and genotyping of Leishmania from smear-positive samples of patients confirmed Leishmania spp subgenus L. (Viannia).

P-31

Visualization of scientific collaboration and themes for dengue, zika and chikungunya diseases in the Caribbean

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Objective: The (re-)emergence of arboviruses in the Caribbean, and worldwide, is a major public health issue of concern to all scientific research stakeholders. This study aimed to use bibliometric analysis to identify the contribution of Caribbean countries to scientific production regarding the

three arboviruses with the greatest impact, namely zika, chikungunya and dengue.

Methods: Bibliographic data related to arbovirus diseases were collected from three international databases (Web of Science, Pubmed, and Scopus), filtered by Caribbean islands of affiliation. VosViewer was used to identify scientific connections between countries or institutions and to identify research themes.

Results: The dataset comprised 1332 indexed articles, with 50% of articles categorized in the top quartile of quality. Cuba was found to lead research on dengue, with a total of 300 articles, and 18 international connections. The USA-Puerto Rico duo was found to be the leader on emerging arboviruses (Zika and Chikungunya), followed by a predominantly French-language cluster (mainland France, Guadeloupe, Martinique). Key research topics were related to clinical presentations, epidemiology, and research on mosquito-borne viruses

Conclusion: Co-authorship network analysis on emerging arboviruses revealed the dynamics of collaboration, and provides insights into Caribbean collaborations that deserve to be created and consolidated in case of resurgence of new arbovirus epidemics.

P-32

The Prevalence of Human Immunodeficiency Virus (HIV) Exposed Infants and Outcome of Direct Blood Spot Test during the period January to December 2019 at Georgetown Public Hospital Cooperation

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Objective: To evaluate the prevalence and management of HIV Exposed Infants born at the Georgetown Public Hospital Cooperation (GPHC) during the year 2019.

Methods: A retrospective analysis was done on records collected by both hard and soft (electronic) copies of all HIV Exposed Infants born at GPHC during the period of January to December 2019. The data collection excluded all infants whose charts lacked documentation of the variables that were under study. Relevant data were then inputted into a spreadsheet to obtain researchers' objectives.

Results: This research shows 2.5% of all neonates born in 2019 at Georgetown Public Hospital were born to mothers who are HIV positive. It was revealed that there was 100% adherence to guidelines pertaining to the start of prophylactic ARVs in neonates. 85% of neonates had Direct Blood Spot testing done prior to discharge from hospital. This research showed that the correlation between mothers with known HIV Positive status and use of ARVs prior to delivery is significant at the 0.01 level.

Conclusion: Overall it can be concluded that World Health Organization (WHO) & Ministry of Health National AIDS Programme Secretariat guidelines for HIV Exposed Infants are satisfactorily being practiced to prevent mother to child transmission in Guyana.

P-33

Incidence of Acute Respiratory Illnesses and Diarrheal diseases in children under five years of age and its relationship with maternal knowledge, attitudes, and practices.

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Objective: To understand the knowledge, attitudes, and practices of mothers of children between ages 1 to 5 years old with regard to diarrhea and acute respiratory tract illnesses as well as to determine their incidence.

Methods: A non-random convenience sampling was performed targeting 110 mothers of children ages 1-5 years. The questionnaire was designed to measure the knowledge, attitudes, and practices of mothers in regard to acute respiratory tract infections (ARIs) and diarrhea utilizing a Likert scale, along with demographics.

Results: The study showed that only 67.27% of mothers knew the correct definition of diarrhea. “Not washing hands” was the most popular response with 36.36% of respondents selecting that option, while 23.64% believed “teething” to be the cause of diarrhea. Our study showed a mean incidence of diarrhea of 1.02 episodes per child per year. The study showed that only 50.91% of persons were able to identify “infections” as the cause of a chest cold. 23.64%, 2.15%, and 14.55% believed that the cause was “playing in the rain”, “not wearing enough clothes”, and “dew falling down on the head” respectively. The mean incidence of ARIs per child per year was calculated to be 1.53.

Conclusion: The data suggests that the knowledge, attitudes, and practices of the mothers attending the Lodge Health Center as it pertains to Acute Respiratory Illnesses and diarrheal diseases are heavily influenced by culture.

P-34

Antibacterial activity of Mustard leaves (*Brassica juncea*) – a potential for alternative antibiotic therapy?

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Objective: To analyze the antibacterial activity of mustard leaves (*Brassica juncea*) against *Staphylococcus aureus*, *Escherichia coli*, *Klebsiella pneumoniae*, *Pseudomonas aeruginosa* and an Extended-spectrum β -lactamases (ESBL) *K. pneumoniae*.

Methods: The extracts from the leaves were obtained using three solvents; ethanol, hexane, and ethyl acetate and concentrated using a rotary evaporator. Serial dilution was used to obtain varying concentrations of the extracts (100-0.78mg/ml) and sterile filter paper discs were placed in the extracts. The Kirby Bauer disc diffusion method was done using Mueller Hinton agar seeded with the five test bacteria. Discs were placed in triplicate on each plate. Discs soaked in pure solvent were used as the negative control and the antibiotics ciprofloxacin, ceftazidime and tetracycline constituted the positive controls. After incubation, any zone of inhibition around the discs was measured in millimeters and the results expressed as mean \pm Standard Deviation.

Results: Zones of inhibition were seen with extracts from ethyl acetate for 100mg/ml for *K. pneumoniae* (20.7 \pm 5.0mm), *K. pneumoniae* ESBL (13.0 \pm 0.0mm), *S. aureus* (17.3 \pm 6.8mm), *E.coli* (11.0 \pm 1.0mm) and *P. aeruginosa* (13.3 \pm 1.5mm). Zones for the 100mg/ml extracts against *K. pneumoniae* ESBL and *P. aeruginosa* were larger than the zones for tetracycline in some cases; and the zones for the ATCC *K. pneumoniae* were larger than those for both ceftazidime (14mm) and tetracycline (18mm).

Conclusion: *B. juncea* is potentially a novel alternative to antibiotic treatment and this study provides a template for investigation of its antifungal and phytochemical properties.

P-35

A description of the schizophrenic patients admitted to the Psychiatric Outpatient Clinic at Georgetown Public Hospital Corporation from 2019 to 2021.

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Objective: To describe newly diagnosed schizophrenic patients at Georgetown Public Hospital Corporation's Psychiatric Outpatient Clinic from 2019 to 2021.

Methods: This was a cross sectional study involving 3170 charts. 96 charts were identified for analysis. Variables were collected. Categorical tests for an association, such as the Chi square/Fisher's Exact test were used to infer relationships among patients presenting with schizophrenia.

Results: Over 3 years, 3% (67.7% males, 32.3% females) of admissions were diagnosed with schizophrenia. The incidence per year was: 2019 4.2%, 2020 2.5%, 2021 2.2%. 8% were married (19% females, 5% males). Median age of onset of: males 25, females 38 (p: 0.002). 52% were employed. 49% AfroGuyanese, 55% IndoGuyanese com-

pleted at least secondary education. 48% of males dropped out of secondary school. Families of origin supported 32% females, 62% males. 62.5% use substances, 36.6% were current multi drug users (31% males, 6.5% females).

Conclusion: Schizophrenia is not a frequent diagnosis at first consult. The incidence of the diagnosis per year was: 2019 4.2%, 2020 2.5%, and 2021 2.2%. Most schizophrenic patients were male and single, of no particular ethnicity. Females were more likely married. Men were a younger age at diagnosis than females. More than half of the patients were employed and had completed at least secondary school. Almost half of males dropped out of secondary school. Males were more likely than females to be supported by their family of origin. More than half of the patients presently used substances and many of these patients were multi-drug users.

P-36

An Investigation into the Prevalence and Effects of Burnout among Medical Students in Guyana

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Objective: To determine the rate of burnout among medical students of Guyana and to identify the causes and effects of burnout among those medical students affected.

Methods: This cross-sectional, quantitative study surveyed 238 medical students from all five medical schools in Guyana. The Burnout Inventory Student Survey (MBI-SS) score was used to determine the risk of burnout among the surveyed students. A piloted, online, de novo questionnaire was used to evaluate the variables recorded on the questionnaire including age, gender, year of study, employment status, causes, effects of burnout inter alia. All quantitative data were analyzed using SPSS v. 26.0 with the chi square and independent samples t-test being used to assess the association between variables. ($p=0.05$)

Results: Data on 238 medical students were analysed ($F=152$, $M=86$), 51.3% of surveyed medical students showed signs of high burnout. ($M=48.3\%$, $F=61.8\%$, $p<0.000$, $OR=3.4$). While there was no significant difference between burnout rates of students in the 1st and 5th years ($p=0.07$), the 5th years were 3.7 times more at risk for burnout than their first years. Majority of the respondents attributed the cause of burnout to 'poorly designed curriculum' and 'high tuition fees.' Consequently, 36.1% of the respondents have 'thoughts of suicide', 25.4% engage in 'safe/unsafe sexual gratifications', and others use alcohol/ 'hard' drugs to cope with burnout.

Conclusion: Medical students are at a high risk of burnout. Medical schools need to design programmes to address the

mental health of its populace and reduce the prevalence and effects of burnout.

P-37

Quality of life, depression, anxiety and stress among older adults living with HIV/AIDS in Kingston and St Andrew, Jamaica during the COVID-19 pandemic

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Objective: To assess the quality of life and mental health of older adults living with HIV/AIDS in the Kingston and St. Andrew, Jamaica during the COVID-19 pandemic.

Methods: A quantitative non-experiment design cross-sectional study was conducted between the period of February 2022 to August 2022, among 204 participants and who were 50 years and older from healthcare centres and HIV/AIDS support centres. The standardized WHOQOLHIV-BREF and DASS-21 were utilised to assess quality of life and mental health respectively. A Brief Researcher-developed assessment tool assessed the impact of COVID-19 on the participants.

Results: The socio-demographic profile revealed more male participants than females. All participants were being maintained on antiretroviral therapy. Majority reported an overall good quality of life. The prevalence of depression, anxiety and stress was found to be less than 40%. Also, majority reported satisfaction with family, community and national support during the COVID-19 pandemic. There was no statistical difference observed in relation with quality of life and depression, anxiety and stress.

Conclusion: In sum, among older adults living with HIV/AIDS during the COVID-19 pandemic, the quality of life was rate as good while depression, anxiety and stress levels were considered low.

P-38

Mental Health and Suicide Risk among Undergraduate University Students in Barbados during the COVID-19 Pandemic

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Objective: To conduct a cross-sectional survey of student mental health and suicide risk during the COVID-19 pandemic using the National College Health Assessment (NCHA), a standardised comprehensive measure of tertiary students' health status, behaviours, and use of health systems.

Methods: The NCHA was distributed online to all current students at The University of the West Indies, Cave Hill, from October 2021 to March 2022. Measures included the Kessler-6 (K6; a measure of generalised psychological distress), Diener Flourishing Scale (DFS), two-item Connor-Davidson Resilience Scale (CD-RISC2), Short UCLA Loneliness Scale (ULS3), and the Suicide Behaviours Questionnaire-Revised (SBQ-R).

Results: A total of 649 students responded to the survey and the response rate was approximately 10 % (accounting for enrollment fluctuation). Approximately, 76.5% of students reported moderate or serious levels of psychological distress. A total of 634 students completed the SBQ-R, of which 231 (36.4%) screened positive for suicide risk. Sex differences in suicide risk were not significant. Another 17 students (2.7%) reported attempting suicide in the past 12 months. Comparison of mean total scores by sex for all mental health scales showed significant gender differences only for the K6. Biological females reported greater levels of psychological distress than did males. Approximately, 30.4 % of students indicated they had received mental health services previously, 14.3% in the past 12 months. Approximately, 75.6% indicated they would consider seeking mental health services in the future.

Conclusion: Alarming rates of self-reported psychological distress and suicidal ideation underscore the need to prioritise student mental health supports during and after the COVID-19 pandemic. Focused interventions informed by longitudinal research are needed.

P-39

Barriers to Diabetes Self-Management in Grenada During the COVID-19 Pandemic: A Qualitative Study

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Objective: The purpose of the study was to gain a deeper insight into the barriers of diabetes self-management experienced during the COVID-19 lockdown in Grenada.

Methods: This study adopted a qualitative methodology and a descriptive phenomenological approach to better understand the experiences of diabetes self-management practices during the lockdown period. Semi-structured interviews were conducted with 13 participants with type 2 diabetes in Grenada over two months. Patterns emerging from the data were identified systematically through the inductive generation of codes from the data using qualitative

software. Codes with similar meanings or relationships were grouped, and links between categories and themes were established.

Results: Ten categories were identified, which were then grouped into two overarching themes: 1) environmental factors and 2) personal factors. Environmental factors like high costs, limited access to resources, COVID restrictions, and lack of support from family and friends were notable barriers. Personal factors like negative attitudes, worry and concern, personal beliefs and values, underlying health conditions, and perceived behavioral control toward self-management were also significant barriers.

Conclusion: This study contributes to an understanding and fills the gap in current knowledge relating to diabetes self-management practices during the COVID-19 lockdown. Findings indicated that several personal and environmental barriers significantly affected adherence to self-management during the pandemic across the five self-management behaviors. The findings may be used to develop a multidisciplinary approach to improve self-management skills and attitudes and promote appropriate diabetes disaster planning for future pandemics. Addressing those barriers to diabetes self-management will improve health outcomes and quality of life.

P-40

A Comparison of the progress of stroke patients referred early versus those referred late for rehabilitation.

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Objective: To assess the effect of early and late referrals of rehabilitation for stroke patients who underwent rehabilitation at the Palms Rehabilitation Center.

Methods: A retrospective chart review study was done in which 743 charts of stroke patients from the years 2011-2013 were reviewed. Of the 743 patients, 63 met the criteria for inclusion in the study. Of these 63 individuals, the research team was able to contact 51 of them. An initial Barthel index score and a late score were used to assess patient progress.

Results: Out of the 51 stroke patients assessed, 58.8 % were males while 41.2% were females. The mean change in the Barthel Score for the early referral group was 31.4 and 25.88 for the late referral group. The mean difference in Barthel score change between both groups was not significant at an alpha of 0.05 using unpaired ttest ($p=0.057343$)

Conclusion: Failure to demonstrate a difference in outcome as assessed by change in Barthel score between the early referred group and the late referred group may represent a type 2 error.

P-41

A Qualitative Exploration of Factors Affecting the Survivorship Experience of Persons Diagnosed with Colorectal Cancer in St. Vincent and the Grenadines Accessing Public Oncology Care

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Objective: To understand the factors impacting the survivorship experience of persons living with a diagnosis of colorectal cancer (CRC) receiving public oncology care in St Vincent and the Grenadines (SVG).

Methods: An interpretive qualitative methodology was used to purposively sample patients with a histological diagnosis of CRC receiving public oncology care in SVG for more than 3 years. Sample size included twelve eligible persons identified by credible gatekeepers at the public oncology center. However, only ten persons participated (8 males and 2 females). All interviews were conducted by one female researcher with a medical background and graduate training in qualitative methods. Interviews were semi-structured and conducted face-to-face in a mutually convenient non-clinical location between June-July 2022. Interviews averaged thirty (30) minutes each, were audio-recorded, transcribed modified verbatim, and coded deductively using Atlas ti 9.

Results: Peer support, financial support and spirituality emerged as socio-economic and cultural factors influencing survivorship. We found that financial challenges reduced access to treatment and diagnostic investigations. This reduction was counteracted by mobilization of support through friends, family, and civil society organizations such as churches, local cancer support groups and donations from persons residing in the diaspora.

Conclusion: Further research is needed in SVG towards development of a) sustainable financial model to support patients undergoing care and b) culturally acceptable CRC health educational material which includes elements of spiritual care. These tools could positively influence adherence to treatment, reduce fear, and increase health agency among patients, thereby facilitating attainment of Sustainable Development Goal 3.

P-42

Responding to the changing needs of Caribbean Cancer Registries through international collaborations and electronic innovation

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Objective: Cancer registration activities in English-speaking Caribbean countries would benefit from improvements to the information technology (IT) application and infrastructure currently in use. In 2020, in response to these identified regional needs, the International Agency for Research on Cancer (IARC) Caribbean Cancer Registry Hub, based at the Caribbean Public Health Agency (CARPHA), began investigating possible alternative IT applications. As a result, a collaborative project developed between IARC, CARPHA, the University of Oslo and the Rwanda National Cancer Registry. Over the period March-October 2022, the DHIS2 Oncology Module – which was developed by the Rwanda National Cancer Registry - was installed, customized, and tested at CARPHA.

Methods: The project Executive Committee was formalized and the DHIS2 Metadata files were imported onto a CARPHA server. The variable list was customized to the core dataset recommended for Caribbean cancer registries and usability testing to assess fit for purpose and ease of use was completed.

Results: The DHIS2 Oncology module was successfully installed and customized for use in Caribbean cancer registries. User-testing participants expressed satisfaction with the DHIS2 Oncology Module application, with the exception that internal-consistency validation rules were not included in the tested application. Additionally, participants reported issues due to a lack of experience using the DHIS2 platform.

Conclusion: The DHIS2 Oncology Module can be installed and customized for use in Caribbean cancer registries. Appropriate training materials would need to be developed to support its installation, customization, and use. Additionally, incorporating the validation rules for internal data consistency is needed.

P-43

Factors Influencing Adherence To Pharmacologic Treatment Of Type 2 Diabetes Mellitus In Public Primary Healthcare Clinics In Barbados: The Role of Social Inequalities In An Advancing Technological Age

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Objective: To understand the phenomenological experiences regarding pharmacological adherence amongst patients (25-65 years) living with type 2 diabetes mellitus

(T2DM) who access care at public primary healthcare facilities in Barbados.

Methods: A qualitative research methodology, informed by an interpretivist philosophical paradigm was used. 52 semi-structured in-depth interviews amongst low-socioeconomic patients living with T2DM in Barbados was conducted via a virtual platform. The interviews which were recorded lasted approximately 30-45 minutes each and they were subsequently transcribed using a modified verbatim process. Inductive coding was performed and thematic content analysis using constant comparison, was carried out by the researcher with assistance from the ATLAS.ti version 9 software programme.

Results: Four basic themes emerged as factors affecting pharmacological adherence: the bio-psycho-social perspective of the patients living with T2DM, barriers to T2DM treatment, the effects that the T2DM treatments caused and the need for a patient-centred health system. Many technological features were described, however some elderly participants were not familiar with smart-phone technology and therefore more innovative strategies is needed for this population. All the results converged towards the global theme implying that the need for a patient-centred T2DM management approach.

Conclusion: The patient-centred T2DM management should be the main focus for public health measures and strategies in Barbados. Several factors, including social inequalities, have influenced the pharmacological adherence to T2DM treatments and hence targeted strategies are needed.

P-44

Inaugural Project to Assess the Burden of Cancer in the Caribbean: Processes, Challenges and Lessons Learned

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Objective: In recognition of the lack of available data on cancer incidence in Caribbean countries and territories, the IARC Caribbean Cancer Registry Hub, Caribbean Public Health Agency (CARPHA) commenced the inaugural surveillance project to assess the burden of cancer in the Caribbean. This manuscript outlines processes used, as well as the challenges and lessons learned throughout this project.

Methods: Ethical approval was received, and ten population-based cancer registries (PBCRs) were officially invited to participate. Participating registries were required to submit official documentation and incidence data for all complete diagnosis years during the period 2000-2020. Data specifications were provided, and a secure reporting portal was established. The quality of submitted data will be assessed and standardized cancer incidence rates generated. A report on cancer incidence in the Caribbean region will be produced and disseminated.

Results: Nine PBCRs verbally agreed to participate. One cancer registry submitted the required documentation and cancer incidence data. Official documentation and data are outstanding for the remaining registries.

Conclusion: Positive feedback from Caribbean PBCRs indicates a general awareness of the importance of and need for high-quality reports on cancer for the Caribbean region. Administrative requirements for official documentation surrounding PBCR participation have delayed project timelines. Ongoing engagement of staff and capacity building in cancer registries to support file preparation, data cleaning and submission is needed. The learning process to overcome challenges is important for CARPHA and for Caribbean PBCRs. The report on cancer incidence in the Caribbean region is expected by December 2023.

P-45

The Willingness of Individuals, with Noncommunicable Diseases, towards Adopting a Plant Based Diet

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Objective: To analyze how associated socio-demographics and health factors impact willingness and perceptions of individuals with noncommunicable diseases towards adopting a plant-based diet.

Methods: A sequential transformative design was used to fulfill the aim of this study. A convenient sample of 344 outpatient clinics attendees at Kingston Public Hospital was used for the study. Data were collected using interviewer administered questionnaires and in-depth interviews; constructs from the Trans-theoretical (TTM) and Health Belief Models were utilized as theoretical frameworks.

Results: Majority (90.9%) of the participants indicated they were not eating a plant-based diet. Willingness to start eating a plant diet in the next six months was expressed by 53.8% of participants. Frequencies for the weekly consumption of fruit juice ($p<0.05$), fruit ($p<0.05$) and orange vegetables ($p<0.001$) significantly differed across the stages of the Trans-theoretical Model. Once participants started eating a plant-based diet, there was a mean increase, of 2 more servings, in the consumption of food categories by

participants in the preparation, action and maintenance stages of the TTM.

Conclusion: Majority of the participants were not eating a plant-based diet but some were willing to change their diet in the next six months. As willingness is essential to behavior change, this study provides information that may be useful in the management of chronic diseases.

P-46

Factors associated with medication adherence among persons with hypertension in faith-based organizations in Barbados

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Objective: To identify socio-demographic factors associated with medication adherence amongst hypertensive persons between 40-75 years-old within faith-based organizations in Barbados.

Methods: Baseline cross-sectional data were collected within faith-based organizations in Barbados as part of a planned cluster randomized trial. Data were obtained from patients who volunteered to participate and who had a blood pressure reading >130/90 mmHg and/or previous medical history of hypertension. We used the Hill-Bone medication adherence scale (reliability(a)= 0.91) as the main outcome. Ordinal logistic regression was used to explore the relationships between medication adherence and socio-demographic factors (age, sex, employment, education and marital status).

Results: We present baseline data from 73 eligible persons. Of these, 71% were female, mean age was 59.3 years and mean systolic blood pressure 142 mmHg, 95%CI (141, 146). In this study, 42% of participants indicated that they forgot to take their medication at least some of the time, 49.1% indicated that they sometimes decide not to take their medication; 21.8% sometimes run out of medication and 29.1% do not take their medication before going to the doctor. No one reported the practice of using other people's medications. Employment status was the only statistically significant predictor for medication adherence in the demographic model fitted, retired persons more likely to adhere than working individuals (Odds Ratio 3.69 95% CI 1.13, 12.0).

Conclusion: The findings showed relatively low levels of medication adherence. The medication adherence deficits highlighted can be used to develop interventions and health promotion activities to increase adherence in this population.

P-47

Clinico-radiological profile of patients with myeloma-related skeletal events at a tertiary institution: a retrospective analysis from 2014 -2018

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Objective: This study sought to determine the prevalence of skeletal-related events in patients with multiple myeloma at the University Hospital of the West Indies between 2014-2018 and to describe their characteristics.

Methods: A cross-sectional retrospective design was used, and 116 patients were eligible. Eligibility included newly registered patients aged 18 years and older patients who were being investigated for a plasma cell disorder between 2014 and 2018. Data was collected to review the type of monoclonal gammopathy, the number of patients with related bone disease, the type of skeletal event and the number of patients with negative surveys that received additional radiological testing.

Results: Multiple Myeloma was commonest diagnosis (n=67, 57%, P<0.05). Only 1 patient (1%, P<0.05) was diagnosed with smoldering myeloma, and 2% (n=2, P<0.05) with plasma cell leukemia. The mean (sd) age 62.81 (11.9) years. For the profile of skeletal events 11%, (n= 5, P<0.05) had lytic lesions, 7% (n = 8, P<0.05) compression fracture, 2% (n=2, P<0.05) plasmacytoma, 1%, (n=1, P<0.05) had a mildly displaced fracture. MRIs detected 9% (n=11) compression wedge fractures, 2% (n=2, P<0.05) lytic lesions. 15 patients in this study obtained negative bone surveys and over 60% (P<0.05) of these patients were positive for skeletal events by either Computed Tomography or Magnetic resonance imaging.

Conclusion: Skeletal related events are common in multiple myeloma. The adherence to the 2014 International myeloma working group guidelines for the diagnosis of Skeletal Related Events are poor and further training of clinicians on these guidelines are warranted.

P-48

The potential role and scope of integrative oncology on the quality of life of patients diagnosed with breast cancer, colon and metastatic prostate cancer who are on active treatment in the Haematology/ Oncology Clinic at the University Hospital of the We

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Objective: To assess the quality of life of patients diagnosed with breast, colon and metastatic prostate cancer who are on active treatment and the potential role of Integrative Oncology in impacting quality of life.

Methods: A sample of 52 patients diagnosed with breast cancer, colon cancer and metastatic prostate cancer on chemotherapy at the UHWI were enrolled in this cross sectional study. Quality of life was assessed using the abridged version of The WHO quality of life scale questionnaire.

The Pearson Chi-squared test was used to determine the association between different variables and the quality of life.

Results: Quality of life was rated as good (55.8%) and very good (28.8%) for most participants. Only one participant (1.9%) rated the quality of life as poor, and no respondent indicated a very poor quality of life.

Conclusion: Quality of life scores were noted to be good and very good in the majority of participants diagnosed with breast cancer, colon cancer or metastatic prostate cancer at the UHWI. There however were lower scores in the psychological domain for patients with colon cancer. There are also also limited dietary and psychology referrals noted in this study. Despite the high quality of life scores noted here, the literature has highlighted the significant impact of integrative oncology.

P-49

An Assessment of the Relationships between Hypertensive Patients' Level of Blood Pressure Control and their Personal Continuity of Care in Selected Public Health Centres in New Providence, Bahamas

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Objective: To evaluate the relationship between personal continuity of care (PCC) and blood pressure control in patients attending selected public health centres in New Providence, Bahamas

Methods: Retrospective chart review with a cross-sectional component on Hypertensive patients attending two government primary care clinics in New Providence, Bahamas: Family Medicine clinic (FMC) and Flamingo Gardens clinic (FGC). Personal continuity of care was assessed by using the usual provider care index (UPIC). UPIC of zero

signifies no continuity while one reflects perfect continuity ie. in all visits, the patient saw the same provider. The averaged mean systolic and diastolic reading were calculated on Hypertensive adult patients who had at least 2 clinic visits within the last 12 months. The JNC8 guideline was used to assess level of blood pressure control.

Results: 353 participants were involved in this study. The mean averaged SBP was 149.7 (\pm 18.4) mmHg and DBP was 82.7 (\pm 10.9) mmHg. Of the 224 participants at FMC, 110 (49%) had controlled BP and the UPIC score was 0.76 (\pm 0.02). The uncontrolled group had 114 (50.9%) participants with a UPIC score of 0.80 (\pm 0.02). Of the 129 participants at FGC, 45 (34.9%) had controlled BP and the UPIC score was 0.50 (\pm 0.04). The uncontrolled group had 84 (65.1%) participants with a UPIC score of 0.52 (\pm 0.02).

Conclusion: PCC was not related to blood pressure control in the study. FMC had a similar high UPIC score value for both controlled and uncontrolled hypertensives groups. FGC had a similar intermediate UPIC score value for both the controlled and uncontrolled hypertensives groups.

P-51

Distribution and frequency of principal Rh blood group antigens (D, C, c, E, and e), Kell antigen, and DAT positivity among blood donors at the National Blood Transfusion Services in Guyana

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Objective: To determine the prevalence of Kell antigen, DAT positivity, Rh antigen, and Rh phenotype among blood donors at the National Blood Transfusion Services in Guyana.

Methods: The study was a retrospective, laboratory-based study collected for the year October 2019 - October 2021. All information regarding Kell antigen, DAT, Rh antigen, and Rh phenotypes was collected from the NBTS. Ethical approval for the study was granted by Institutional Review Board, Ministry of Public Health, Guyana.

Results: The study had 15,494 donors from regions 2, 3, 4, 6, 9, and 10 and mobile drive. The study had blood group O at 47.7%, A at 22.3%, B (at 23.9%, and AB at 6.1%. Among the total blood donors, 392 (2.5%) had a negative Rh and 15,102 (97.5%) had a positive Rh. Interestingly, 63 (0.4%) were recorded as having the presence of weakly expressed D antigen. Percentage of Kell antigen recorded with 208 (1.3%) and DAT positivity with 19 (0.1%). The phenotype distribution of c+ was the most dominant antigen (76.3%) followed by e+ (72.2%), C+ (53.8%), and E+ (31.8%). The most common phenotype among Rh-positive (D antigen) donors was Dccee (40.1%) followed by DCcee (27.8%).

The most common phenotype among Rh-negative (D antigen) donors was dccee (1.6%). The majority of the Dccee phenotype was present in the Afro-Guyanese ethnic groups. **Conclusion:** The knowledge on the presence of antigens would help in better handling of databases of blood donors as well as provide information on blood incompatibility of patients with various alloantibodies.

P-52

Effectiveness of diversion pouch and modified skin disinfectants in reducing bacterial contamination of platelet components at the National Blood Transfusion Services, Guyana

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Objective: To determine the prevalence of bacterial contamination in donor-collected platelets components using the diversion pouch integrated blood collection system at the National Blood Transfusion Services, Guyana.

Methods: This is a single-site cross-sectional, comparative study that was carried out at the blood bank from July 2022 to August 2022. A total of 70 platelet concentrates were collected, 35 samples were from donors swabbed with isopropyl alcohol while 35 samples were from donors with a combination of iodine and isopropyl alcohol. Gram staining, culture, and subculture were done in Trypticase Soy Broth, blood agar and eosin methylene blue agar media, MacConkey agar, and Chocolate agar.

Results: Of the 70 samples tested, 7 (10%) samples had contamination. Of the 7 samples that were found contaminated with the presence of various bacterial species, 5 samples were found contaminated with Gram-negative bacilli, 1 sample was found contaminated with Gram-negative cocci, and 1 sample identified Gram-positive cocci. The occurrences of bacterial contamination of platelets were significantly lower when utilizing the combination of hand scrub, iodine, and isopropyl alcohol (1 in 35) in comparison to the usage of isopropyl alcohol alone (6 in 35) ($p=0.05$). The study also identified a significant reduction in bacterial contamination with the usage of a diversion pouch (10%) than the usage of collection bag (85.7%) ($p=0.05$).

Conclusion: A diversion pouch blood collection system in combination with aseptic method of iodine, isopropyl alcohol, and a hand scrub is an efficacious method in reducing bacterial contamination in platelets during the collection of blood.

P-53

Quantitative and Qualitative Analysis of Potable Water at Water Refill Stations and Purchasers' Perceptions Within Selected Communities In Guyana

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Objective: To comparatively assess the quality of potable water from selected water refill stations in an urban and rural community and to understand purchasers' attitudes and practices towards water refill stations.

Methods: A cross sectional study was conducted which included six (6) water refill stations and 612 randomly selected purchasers. The water samples were collected at various times and on different days of the week. Data was collected using pretested interview schedule, observational checklist, and purchaser questionnaire. The questionnaire consisted of demographic variables inclusive of : gender, age, educational level, and ethnicity. The questionnaire included a section on preliminary data, a section on attitudes and practices and another section on differential association and another section on differential reinforcement. The questionnaire was divided into: 3 questions in the preliminary data section, 13 questions in the attitudes and practice section, 6 questions in the differential reinforcement section and 9 questions in the differential association. Prior to being operational the questionnaire was piloted. The Cronbach alpha test revealed a score of 0.80. A p-value of ≤ 0.05 was used to determine statistical significance.

Results: The results showed that only 50% of the refill stations avail themselves of any form of independent water quality testing. Moreover, water refill stations within the urban community showed more voluntary compliance with the local standard. A significant association of water quality parameters was seen in pH (0.00), turbidity (0.04), iron (0.01), and aluminum (0.000). There were also notable differences within the means of total dissolved solids (Urban (44.1)-Rural (50.7) and total coliform Urban (18.6) Rural (2.1). There were generally good attitudes and practices among purchasers with sex (0.05), education (0.00), and ethnicity (0.03) showing significant association.

Conclusion: While the framework exists, though voluntary, for water refill stations to operate there are concerns surrounding the quality of refill water. Several water quality parameters were out of range which justifies quality concerns. Nevertheless, water refill stations within the urban community had fewer violations as compared to those in the rural community. That aside, purchasers were noted as having good attitudes and practices towards refilling water and water refill stations.

P-54

Healthcare resilience in Trinidad and Tobago: A short report on the Healthy Hospital Initiative at the Sangre Grande Hospital

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Objective: To describe the establishment of the Healthy Hospital Initiative (HHI), its activities and accomplishments, challenges and future steps.

Methods: The initiative was implemented at the Sangre Grande Hospital in the Eastern Regional Health Authority (ERHA), one of five Regional Health Authorities in Trinidad and Tobago. A review of personal records maintained by members of the Healthy Hospital Initiative was undertaken. These records included descriptions of the activities, accomplishments and obstacles that the team experienced.

Results: The Healthy Hospital Initiative was launched in November 2019 with the aim of creating an environmentally sustainable health system and improving the physical and mental health of staff and patients. A senior doctor led the initiative and team members included a range of staff including both clinical and non-clinical professionals who were all volunteers. This allowed for a multi-directional inclusive approach and created a sense of ownership amongst the staff.

In 2022 several activities were implemented: green spaces, recycling bins, a kitchen garden and staff exercise sessions. In addition, team members participated in training on Pan-American Health Organization (PAHO) Smart hospitals and collaborated with a local non-governmental organisation as well as the University of the West Indies, St. Augustine campus engineering department to develop further projects.

Conclusion: The Healthy Hospital Initiative has created a more health conscious and climate-friendly culture within the hospital. Next steps include promoting similar projects in community health facilities, developing a hydroponics system, assessing the disaster resilience and carbon footprint of the hospital.

P-55

Histopathologic Findings in Clinical Acute Appendicitis: the University Hospital of the West Indies Experience in the Era of Computed Tomography

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Objective: To classify and determine clinicopathological concordance of appendectomy specimens submitted for clinically suspected appendicitis in the era of computed tomography within a Jamaican institution.

Methods: A retrospective review of 1406 Pathology reports, generated during a 10-year period was done. Chi squared and T-tests were used to determine statistical significance where appropriate.

Results: Acute appendicitis was histologically confirmed in 1110 (79%) of 1406 cases; 658 (59%) were complicated, with an overall perforation rate of 5%. Age-specific frequency of complicated appendicitis was greatest in persons within the 7th decade of life (100%). The overall negative appendectomy rate declined to 21%. The gender-specific negative appendectomy rate was highest in child-bearing women (34%).

Conclusion: A high concordance rate between the clinical and histological diagnoses exists. The overall rate of complicated appendicitis is high; however, the rate of perforated appendicitis is low. Elderly patients with acute appendicitis seem more likely to have a complicated course, as such early diagnosis is critical to decrease mortality and morbidity. Despite the general decline in overall negative appendectomies, the rates remain significantly high, even in the era of increased availability of computed tomography at the University Hospital of the West Indies.

P-56

Assessing the effect of motivation factors on the employees' work performance in Public Healthcare

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Objective: To scrutinize the effects of intrinsic and extrinsic motivation factors on employees' performance in public Healthcare.

Research Questions

1. Is there a correlation between motivation and employee performance in public healthcare?
2. To what extent does intrinsic and extrinsic motivation impact work performance in public healthcare?

Methods: A qualitative approach was utilized for this investigation. It involved the identification of relevant research questions followed by the selection of literature based on keywords as well as inclusion and exclusion criteria. The scientific materials obtained were rationalized and categorized into distinct areas such as Motivation theories, Performance management, and Motivation in Public Adminis-

tration. The data was then extracted for further evaluation, interpretation and synthesis.

Results: The findings showed that there is a considerable link between job performance and work environment as employees need a cooperative, happy and clean environment to function to the best of their ability. Moreover, it was asserted job satisfaction is influenced by intrinsic motivational elements as such self-efficacy, and fulfillment occurs when healthcare professionals are given the opportunity to test their professional core competencies. In addition, extrinsic motivators such as compensation and benefits have significant effect on employee performance therefore extrinsic motivational elements are critical in addressing challenges and job satisfaction in the public healthcare industry.

Conclusion: This study revealed that motivation has a significant impact on the effectiveness of government entities; As a result, it is critical to ensure that every person in the organization is motivated.

P-57

An Assessment of the Frequency and Knowledge towards Needlestick injury among Health Care Workers in the Emergency Medicine Division of the University Hospital of the West Indies: Does educational intervention make a difference?

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Objective: Healthcare workers are at risk for occupational exposure to blood-borne infections from accidental needlestick injuries (NSIs). This study aims to assess the overall frequency and knowledge of needlestick injury (NSI) among healthcare workers in the Emergency Department (ED) at the University Hospital of the West Indies.

Methods: This was a prospective interventional study, which was conducted at the University Hospital of the West Indies from January 1, 2019, to March 31, 2019. There were 128 study participants. The data was analyzed using the Statistical Package for Social Sciences version 20.0. The Chi-square test and McNemar's test were utilized in the data analysis.

Results: 29.7% of the study population had experienced an NSI during their careers in the emergency room. Doctors accounted for 57.9% of all NSIs in the study population. The rates of reporting of NSIs were 40.9% amongst doctors, 50% in ancillary staff, and 100% in certified emergency nurses, registered nurses, emergency room technicians, and phlebotomists.

Conclusion: The overall frequency of NSIs was 29.7%, with doctors being the category of healthcare workers with the majority. Most of the participants who attended the edu-

cational session stated that it was beneficial; however, there were inconsistencies in the improvement in knowledge.

P-58

Development of Scientific and Clinical research Cooperation in the CARibbean: feasibility study (DOSCCAR)

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Objective: The Caribbean zone presents several epidemiological specificities that constitute major public health issues. The objective of this study is to provide a combined information from different types (bibliometric data, regulatory aspects, research Funding...), to researchers and research institutions in the Caribbean to facilitate collaboration and the development of research production in the region

Methods:

- Bibliometric analyses will be performed with the analytic tool Web Of Science. The search period for all scientific publications by country will cover the period from 1990 to 2022.
- Regulatory aspects : presentation of the different regulatory approaches specific to each country by type of research project
- Connecting support team : Bringing research support units closer together in order to share support methods for researchers and thus improve knowledge of the organization of the various research units.

Results: With the bibliometric results, we will obtain for each 5-year period, the evolution and the specificity of publications produced by 18 Caribbean countries organized by quantitative and performance indicators. An atlas of each regulatory process by country in the Caribbean will be available by type of research with all mandatory documents to submit. Several exchanges of practices between the research support units in the region could give place to a uniform descriptive card allowing the various institutions and researchers to project themselves on collaborations by knowing better the environment

Conclusion: Collaborations between our neighboring countries are undoubtedly the key to success in research in order to reduce the burden of health care issues

P-60

Sickle Cell Disease Patients' Self-Reported Experiences Regarding their Emergency Department Pain Management in Nassau, The Bahamas

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Objective: Objective: To evaluate SCD patient's knowledge, attitude, practice and self-reported experiences including perception of adequacy of pain management received in the ED.

Methods: Design and Methods: This longitudinal study spanned six-months using an administered questionnaire to measure participants' knowledge of SCD, their knowledge and perception of pain management, and satisfaction with their ED treatment and selected socio-demographic variables. Computer-aided quantitative analyses produced descriptive and inferential statistics.

Results: Results: Study participants included 30 SCD patients. Their median age grouping was 21-30 (13-20, 21-30) years with 12 (40.0%) male visits and 18 (60.0%) female visits. Patients were generally aware of SCD and care-related factors with just over (70.0%) having adequate to excellent knowledge scores. The ED was the preferred place for help in 27 (90.0%) participants and 28 (93.3%) reported their pain intensity as severe before help was sought. The door-to-doctor time was > one hour for 20 (66.7%) participants and the door-to-analgesia time was > two hours for 17 (56.7%) participants. Seventeen (56.7%) patients disagreed they were seen in a timely fashion. Eighteen (60.0%) patients disagreed that they received analgesics in a timely fashion. Twenty-four (80.0%) participants agreed that they had a knowledgeable attending physician and 25 (83.4%) agreed that they had a good relationship with their physician. Nineteen (63.3%) patients agreed that they received adequate pain management and 20 (66.7%) were satisfied with their ED experience.

Conclusion: Conclusion: Patients were knowledgeable about SCD and their pain management and were satisfied with the care received during their crisis. However, institutional protocols are needed to correct the delay in care during the management of a VOC.

P-61

Applications of chemical, environmental and biological techniques to control phlebotomine sandflies in an effort to reduce Leishmaniasis in Guyana: A field study

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Objective: The aim of this research was to determine which geographical areas, in Guyana are most affected by leishmaniasis and to identify the efficacy of different vector control

techniques in reducing the number of phlebotomine sandflies vectors.

Methods: The experiment was conducted in Regions 4, 7, and 10 in zones which were near bushes, grass, and fresh water. The sampling strategy used 3 trapping methods namely the BG Sentinel, the Human Landing Catch, and the Light Trap. The traps were set between 6am and 6pm and 10pm in the evening. Permethrin-treated bed nets were placed over two cartilages to examine the effectiveness of the environmental treatment. Bioassays were used in chemical applications to assess efficacy.

Results: A total of 71 charts were assessed for the retrospective chart review(RCR), but only 54 were actually used. The highest cases were found in Regions 7 and 10, according to the analysis. Permethrin-treated bed nets have been shown to completely eradicate newly introduced sandflies in environmental applications. Comparatively, the indoor residual spraying (IRS) had a 90% fatality rate for chemical applications.

Conclusion: In comparison to the light trap, the BG-Sentinel and HCL were more successful at catching sandflies. According to the experiment that was done for this study, both chemical and environmental applications were effective in eliminating sandflies.

P-62

Preliminary Assessment of Disaster Preparedness Education/Training for Health Care Workers in The Bahamas

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Objective: To identify the current disaster preparedness knowledge, experience, and education level of healthcare workers at healthcare facilities in The Bahamas.

Methods: The study was a cross-sectional survey of a public and private healthcare providers in The Bahamas. The assessment survey tool was designed by the researcher and evaluated by the research team because there are no tools available locally. The study was conducted between the periods of April 01 to May 31, 2022. Participants were canvassed via emails and phone calls. Respondents were self selected. Participants comprised of registered physicians, nurses, Emergency Medical Technicians (EMT), and other allied health professionals involved in disaster response. Respondents will be sought at the Princess Margaret Hospital (New Providence), Doctors Hospital Health System (New Providence), Sandilands Rehabilitation Centre (New Providence), National Emergency Medical Services (NEMS) base (New Providence), The Rand Memorial Hospital (Grand Bahama), and The Department

of Public Health Community Clinics. The assessment survey addressed questions surrounding disaster preparedness training/education, care of victims as well as health and disaster related agencies. The survey was conducted via Google forms and included the following information:

- Basic demographic information
- Education and knowledge regarding disasters
- Preference on type of disaster to focus education on
- Preference of education modality
- The amount of time able or willing to dedicate to disaster education/training
- Barriers to participation in disaster education/training

Results: Data from 139 respondents was used for analysis (M 18, F 121), 6.5% had not served during a disaster event prior. 60.4% had not received prior disaster preparedness training/education. Of the 39.6% that received training, 49.1% utilized continuing education courses. 60.7% of health care workers training was focused on a natural event i.e. tornado/fire/hurricane. 54.9% of participants indicated a general lack of education programs as being a barrier to participation in education/training. 37.1% preferred hands-on training as the method for receiving training/education, while 49.3% were willing to participate in at least 2 training/events per year.

Conclusion: Some healthcare workers in The Bahamas reported a lack of disaster preparedness training/education. Priority should be given to ensuring all healthcare workers are trained in disaster preparedness because The Bahamas along with other Small Island Developing States in The Caribbean are most at risk for disasters. Therefore disaster training/education is critical building block for climate resilient health system.

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Choosing Wisely Trinidad and Tobago: Top 5 Recommendations for Emergency Medicine

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Objective: To identify the top five Choosing Wisely recommendations for the Trinidad and Tobago Emergency Medicine Association (TTEMA)

Methods: A modified Delphi process was used. An initial list of 27 recommendations was developed by compiling all Choosing Wisely Emergency Medicine recommendations from existing international campaigns. This was distributed to an expert panel from the TTEMA. To generate the final

list of five, each panel member voted on each recommendation based on: action-ability, effectiveness, safety, economic burden, and frequency of use.

Results: The top five recommendations were:

- 1) Avoid instituting intravenous (IV) fluids before doing a trial of oral rehydration therapy in uncomplicated emergency department cases of mild to moderate dehydration in children
- 2) Do not order CT head scans in adult patients with simple syncope in the absence of high-risk predictors
- 3) Do not request imaging of the cervical spine in trauma patients, unless indicated by a validated clinical decision rule
- 4) Do not order CT pulmonary angiograms or VQ scans in patients with suspected pulmonary embolism until risk stratification with decision rule has been applied and when indicated, D-dimer biomarker results are obtained
- 5) Avoid coagulation studies in emergency department patients unless there is a clearly defined specific clinical indication, such as for monitoring of anticoagulants, in patients with suspected severe liver disease, coagulopathy, or in the assessment of snakebite envenomation

Conclusion: This is the first Choosing Wisely initiative in the Caribbean. Next steps include creating awareness, working groups for each recommendation and developing strategies for implementation.

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The Students Are Hungry: A Theoretical Application to Understanding Food Insecurity Among Minority College Students in Urban Settings"

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Objective: To identify a model and solutions on food insecurity mitigation for minority college students in urban institutions.

Methods: Two prominent student development were combined with public health and psychological theories to develop a new approach to theory-based methods of addressing food insecurity for minority students at urban institutions. Social network, ecological systems theory, and mattering and belonging were used to assess pathways on how food security can be addressed in the college setting through connections between minority students and higher education professionals. The traditional ecological system theory model was updated to reflect the modern student and college experience; hence a networked approach was used.

Results: A sample model was developed, which highlighted the relationship between the minority student and 8 key personnel within the college setting that can influence their food insecurity status. The model also showed how the key players can use their social networks with other key players

to gain resources and knowledge to address food insecurity of minority students on their campuses. A demonstration of how the model can be used by higher education professionals is provided along with an example of how higher education professionals can address students' mattering and belonging on campus through the development of a Comprehensive College Transition Program College Transition Program.

Comprehensive College Transition Program.

Conclusion: Findings of the developed model suggest pathways of social connections that higher education professionals can use for direct alleviation of food insecurity, which has major implications for the academic achievement, social connections, and a general sense of mattering and belonging.

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Amiodarone Induced Hypothyroidism- A Case Study

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Objective:

- To provide some clarity as to the best approach for the management of patients on Amiodarone in a clinical setting.
- The paper will also help to highlight the role of routine monitoring of a patient on amiodarone for thyroid dysfunction since the chances of a thyroid-related event is unpredictable

Methods: This is a case study that reviews several research papers critiquing the pros and cons of Amiodarone use in a clinical setting. Best practice decisions are highlighted in what is done around the world in both first-world settings and rural communities

Results: Even though the cases discussed may be common and easily treatable, especially with new guidelines, research data available, better screening options, and new medication, Amiodarone induced-thyrotoxicosis (AIT) continues to be very challenging for physicians to diagnose and treat properly. The various subtypes can be difficult to identify or result in an easy mix-up. In cases of a poor initial assessment, the best treatment approach can be affected. Amiodarone remains superior to dronedarone as an antiarrhythmic drug especially as it relates to potency, tolerability, and availability. The side effect of amiodarone on thyroid function would not deter physicians from its uses in arrhythmias but rather physicians are encouraged to perform a thorough initial thyroid review of patients and develop a proper follow-up plan for monitoring thyroid function

Conclusion: While the decision to discontinue amiodarone after the onset of thyroid problems is challenging, careful

thought should be given to its benefits in stabilizing patients with arrhythmias and the possibility of still having to worsen or prolong thyroid dysfunction symptoms even after stopping the drug due to its prolonged half-life. In order to have a clear distinction between type one and type two AIT, a thorough clinical history needs to be taken, complimented with a physical examination and screening for pre-existing thyroid problems.

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Examining Cancer Stigma and its Role on Cervical Cancer Prevention within Highrisk Caribbean Countries

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Objective: To investigate the manifestations of cancer stigma among men and women aged 18-85 in Grenada, Jamaica and Trinidad & Tobago and its potential role in cervical cancer prevention behaviors.

Methods: A cross sectional qualitative study design was employed using focus groups in Grenada, Jamaica, and Trinidad & Tobago to understand stigma and its role in cervical cancer prevention behaviors. Thematic analysis was conducted using MAXQDA data analysis software.

Results: Three focus groups were conducted in each country. Major themes surrounding the impact of stigma on cervical cancer prevention efforts included fatalism, cultural views, and confidentiality. Participants were knowledgeable about the sexually transmitted nature of HPV that causes cervical cancer -- this fed into the stigmatization of cervical cancer. Stigma was associated with unfounded associations with female promiscuity. Expressed as blame and the belief that women with cervical cancer ought to feel ashamed, this stigmatization of cervical cancer creates major barriers to HPV vaccination and pap testing. Cancer is often considered a death sentence and seldom discussed among family and friends -- further barring women from screening and early detection and getting support. Fear and misinformation associated with the pap testing procedure and perceived lack of medical confidentiality also hinder screening.

Conclusion: Both generalized cancer stigma (death sentence) and specific cervical cancer stigma (shame, blame)

negatively influence cervical cancer prevention efforts. Additional research measuring the multiple dimensions of cancer stigma is required to inform interventions for improving cervical cancer screening and HPV vaccination in the Caribbean.

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Ant's bush (*Struchium sparganophora*): An indigenous Guyanese plant with antimicrobial properties

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Objective: To investigate the effects of ant's bush (*Struchium sparganophora*) against *Escherichia coli*, *Staphylococcus aureus*, *Pseudomonas aeruginosa*, *Candida albicans* and *Cryptococcus neoformans*.

Methods: Hexane and methanol extracts were obtained from the ground leaves and concentrated using a rotary evaporator. Sterile filter paper discs were soaked in different concentrations; obtained by mixing distinct volumes of crude extract with varying amounts of solvent from 100% pure extract to 1% (10µl of pure extract and 990µls solvent). The Kirby Bauer technique was done, and discs were placed in duplicate. The media and positive control for the bacteria were: Mueller Hinton and ciprofloxacin; and for the fungi: Sabouraud's Dextrose Agar, and ketoconazole and fluconazole. The pure solvents were the negative controls. Susceptibility zones were measured in millimetres and expressed as mean ± Standard Deviation.

Results: The methanol extract was effective against *S. aureus* at 50% (11 ± 1mm) and 25% (9 ± 0mm), whilst the hexane extract was most effective at 100% (11 ± 1mm). Of note, the mean zone diameter observed with methanol extracts (25%) for *P. aeruginosa* was 21.5mm, when compared with ciprofloxacin, for which susceptibility is a zone of =21mm. For *C. neoformans*, the largest zone was seen with the 20% hexane extract (35.5 ± 5mm), which was comparable to the zones obtained for fluconazole (32 ± 2mm) and ketoconazole (39.5 ± 0.5mm). Zones of inhibition were also seen with *C. albicans*.

Conclusion: We recommend that further antimicrobial and phytochemical analyses with additional solvents be undertaken with other microbial species.

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"Letting our hair down"- Practices of Chemical Hair Relaxer, Texturizer and Straightener Use amongst Women in New Providence, The Bahamas

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Objective: This study aimed to assess the practices of chemical hair relaxers, texturizers, and chemical hair straightener use among women in New Providence and to determine if these substances were harmful.

Methods: A cross-sectional study was conducted within women's social and civic groups and at the Elizabeth Estates Clinic using a self-administered questionnaire. Convenience sampling was used, statistical analysis was done, and bivariate and multivariate analyses were performed to determine associations between practices and disorders reported.

Results: Women between the ages 18 and 70 completed 480 surveys, the mean age being 39.3 (±12.8) years. The mean Body Mass Index (BMI) reported was 30.8kg/m². Almost all participants (95.8%) used chemical hair straighteners previously. Most had used hair relaxers (87.1%), Most processed their hair for less than 15 minutes (62.9%), most used neutralizing shampoo to remove the product (83.7%), and (60.7%) were prompted to remove the product by a burning sensation. The most common problems experienced included hair breakage (30.4%), split ends (27.3%), chemical burns to the scalp (25.8%), scalp irritation (18.0%), brittle frizzy hair (16.7%), dandruff (12.5%), receding hairline/edges (8.2%) and temporary hair loss (8.0%).

Conclusion: The findings in this study suggest that participants largely adhered to the recommended use of these products. There is an association between hair relaxers and texturizer use and BMI/obesity and dermatologic adverse effects. These results can be used to inform physicians and advise women on product use.



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