Oral Abstracts

O_3

The Impact of Climate Change on Caribbean Athletes: Risks and Public Health Implications for the Caribbean

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Objective: To investigate how athletes in the Caribbean perceive and respond to climate change by identifying climate-related health risks, adaptive and coping strategies, and stakeholder support mechanisms.

Methods: The study utilized a qualitative descriptive design. Purposive sampling was used to recruit 20 athletes from across the English-speaking Caribbean to participate in this study. Data were collected using semi-structured interviews via Zoom. Interviews were audio recorded and transcribed using Otter AI and were analysed using thematic analysis.

Results: Four themes emerged: perceived susceptibility to climate change, climate-related health risks, adaptive and coping strategies, and stakeholder support. Athletes generally showed an awareness of the impact of climate change on their training, performance, and wellbeing. Participants identified several climate-related changes in the Caribbean, including rising temperatures and poor air quality from intensified Saharan dust. They expressed that these changes increased their susceptibility to climate-related health conditions, including respiratory illness, exertional heat illness and dehydration. Despite these challenges, most athletes relied on personal coping strategies such as training schedule adjustments and extra hydration but claimed there was mixed support from stakeholders to make climate-related adjustments.

Conclusions: These findings call for the integration of climate adaptation strategies into public health frameworks

and the development of support for athletes, coaches and administrators to better manage climate-related health risks among athletes. Strengthening collaboration between health professionals, sport organizations, sport social workers, and policymakers is essential to build resilience and ensure the safety and well-being of athletes, while also informing broader community health responses to Caribbean athletes and environmental change.

O4

The Impact of Climate Change on Dengue Fever Incidence in East Trinidad over a 13-year period (2012–2024)

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Objective: To investigate the relationship between climate variability and the incidence of dengue fever in East Trinidad over a 13-year period (2012–2024).

Methods: A retrospective ecological time-series study was done utilizing monthly dengue fever surveillance data (January 2012–December 2024) collected from sixteen primary care centres and one hospital under the Eastern Regional Health Authority. Climatic data, including temperature, precipitation, humidity, dew point, wind speed, gust wind, and sea level pressure, were sourced from the Piarco International Airport meteorological station. Data were compiled in Microsoft® Excel® and analysed using Spearman's rank correlation in IBM® SPSS® Statistics 27 to assess associations between climatic variables and dengue fever incidence. Statistical significance was set at the 95% confidence level (p < 0.05).

Results: A significant drop in average annual dengue fever cases was observed between 2012–2018 (308.4 cases/year) and 2019–2024 (62.5 cases/year). The highest incidence

occurred in 2015 with 560 cases (4.8 per 1,000 persons). Most cases occurred between July and October, with August averaging 33.5 cases, aligning with the country's Wet Season (historically from June-December) characterized by elevated temperature, dew point, humidity, and precipitation. Spearman's correlation revealed significant positive associations between dengue cases and both temperature (p = 0.27, p = 0.0006) and dew point (p = 0.22, p = 0.006). Other variables, including precipitation, humidity, wind speed, gust wind, and sea level pressure, showed weak and non-significant relationships (p > 0.05).pr

Conclusion: Temperature and dew point were positively associated with dengue incidence in East Trinidad, particularly during the rainy season. The observed associations between climate variables and dengue incidence support incorporating climate monitoring into dengue surveillance and public health preparedness.

05

Eco-Anxiety and the Impact of Climate Change on Mental Health Among University Students in Trinidad

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Objective: To investigate the effects of climate change on university students' mental health in Trinidad.

Methods: A cross-sectional survey was conducted January to June 2025, involving 295 students across all faculties of The University of the West Indies, St. Augustine Campus, using convenience sampling. Data were collected via an anonymous online questionnaire that included the validated Hogg Eco-Anxiety Scale (HEAS) and questions assessing climate-related mental health symptoms, lifestyle behaviours and coping strategies. Data were analysed using descriptive statistics, Mann-Whitney U tests and Kruskal Wallis tests.

Results: Participants were predominantly aged 18-26 years (90.5%, n=267) and female (70.5%, n=208). HEAS scores ranged from 0 to 36, with higher scores reflecting greater eco-anxiety. Younger respondents (18-26 years) reported higher mean HEAS scores 8.85 (SD 7.36) compared to those in the 27-35 years (8.44 (8.58)) and >35 years (6.8 (5.18)) age groups. Although females showed higher mean HEAS scores (9.39 (7.08)) than males (7.22 (7.87)), this difference was not statistically significant (p = 0.07). Year of study (p = .04) and faculty (p = .01) were significantly associated with HEAS scores, with first-year, final-year, and Food and Agriculture students reporting the highest mean

distress levels of 10.8 (7.21), 11.1 (13.10), and 14.5 (7.61), respectively. Those with a history of mental health conditions had significantly higher mean HEAS scores 11.20 (9.16) (p = .03). Coping strategies included social support (40%, n=118), personal climate action (33.6%), and environmental activism (28.1%, n=83), while only 17.6% (n=52) sought therapy. Most respondents (71.9%, n=212) felt university mental health support was inadequate, and awareness of available services remained low.

Conclusion: Findings reveal substantial eco-anxiety and climate-related psychological distress among university students. This underscores the urgent need for targeted mental health interventions, improved campus-based support services, and climate resilience education to strengthen student well-being in the face of the climate crisis.

O6

Exploring the Experiences and Coping Abilities of Registered Mental Nurses on COVID-19 Wards at the St. Ann's Psychiatric Hospital

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Objective: This study explored the lived experiences and coping abilities of Registered Mental Nurses (RMNs) who provided care in COVID-19-designated psychiatric wards at the St. Ann's Psychiatric Hospital (SAPH). It aimed to understand the psychological, professional, and systemic challenges they faced and strategies that could strengthen resilience in future public health emergencies.

Methods: A qualitative, exploratory case study was conducted using convenience sampling. This study design was consistent with the unique experiences shared by RMNs managing the care of the mentally ill during a pandemic of a novel infectious disease. Ten RMNs who worked on Wards 2 and 3 at the SAPH between September 2020 and March 2023 participated in the study. Semi-structured interviews were scheduled and conducted through the Nursing Research Unit, in which RMNs' reflective feelings, rituals performed before duty, mental capacity, changes in physiological state, relationships, behaviours, and coping proficiencies were explored. Data were thematically analysed.

Results: RMNs predominantly described emotional distress, cognitive fatigue, and heightened anxiety, with one participant noting being "filled with dread" before reporting to duty. Also, most RMNs highlighted infrastructural challenges and knowledge gaps in general medical care, with half the participants highlighting resource constraints, and a few indicating fractured communication among healthcare teams. Despite these challenges, participants generally demonstrated coping through self-reliant methods, dependence, and spiritual grounding. Strategies

included resolute mindsets, thankful dispositions, selfeducation to address new care protocols, relying on family and colleagues, and prayer.

Conclusion: The findings underscore the urgent need for integrated mental health support, inter-professional training, and inclusive crisis response planning. Recommendations include normalising infection prevention measures, developing staff-wide drills, and involving RMNs in decision-making processes. These measures can build sustained coping capacity and institutional readiness. Further research is needed to assess long-term effects on psychiatric nursing in pandemic settings.

O7

Public's awareness, perception, and practices towards counterfeit medicines: A cross-sectional study

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Objective: To determine the public awareness, perception and practices to counterfeit medicine (CM) in Trinidad and Tobago.

Methods: The survey comprised 22 questions and was distributed to the public via flyers with a QR code at local pharmacies and via snowball sampling on social media platforms. Statistical analysis was carried out using Statistical Package for the Social Sciences (SPSS) version 29, and Chi-Square analysis was used to detect a significant association between demographics and measured variables.

Results: Respondents (n=404) were mostly females (64%), had a mean age (\pm SD) of 37.33 \pm 15.24 years, attained tertiary level education (47.5%), resided in Central Trinidad (35.9%) and were employed in the nonmedical field (60.4%). Most (89.7%) obtained medication from community pharmacies, and 27.4% were not familiar with the term CM. Only 26.3% were certain they had never purchased CM, and less than half (41.7%) were able to identify features of CM. Familiarity with CM was associated with increased levels of education ($\chi 2$ (3,293) = 70.886, p<0.001) and occupations in the medical field (χ 2 (1,293) = 28.909, p<0.001). Respondents heard of CM from social media (61%) and television (46.1%). Higher education level was associated with the likelihood to seek advice from the pharmacist ($\chi 2$ (3,293) = 32.05, p<0.0001). Despite perceiving that CM was inferior (91.1%) and the risk of purchasing from the internet was greater (80.5%), some would still purchase from that source due to lower price (23.2%) and medication shortage (30.7%). Reporting of CM was low with 18% stating they would report to the Caribbean Public Health Agency (CARPHA) via VigiCarib.

Conclusion: Participants were unable to identify CM features, and some remained willing to purchase CM due to lower prices and medication shortages. Reporting to regulatory authorities waswas low, and there is a need to increase awareness, vigilance, and reporting of CM.

08

Community Pharmacist's Knowledge, Attitude and Practices Regarding the Use of Over-the-Counter Preparations Containing Codeine

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Objective: To determine the knowledge, attitudes and practices of community pharmacists regarding the dispensing of over-the-counter preparations containing codeine, given increasing global opioid abuse.

Methods: A cross-sectional study utilising convenience sampling was conducted over eight weeks using a self-administered 23-item online questionnaire, distributed to registered pharmacists through the Pharmacy Board of Trinidad and Tobago. Statistical analysis was performed using SPSS version 29, with Chi-Square analysis to detect associations between demographics and measured variables. A value of p<0.05 was considered statistically significant.

Results: Of 260 respondents, majority were female (62.7%), had a Bachelor's Degree in Pharmacy (83.1%), and had less than 10 years' experience (63.1%). More than half were unable to recognize side effects such as blurred vision (55%), low blood pressure (68.8%) and seizures (81.9%). These findings were not associated with demographics, however, females were less likely to identify itching/rash (70.8%), $\chi^2(1, N = 260) = 7.397$, p = 0.007). More than half (51.9%) were not aware that dilated pupils is a sign of codeine abuse. Though majority (80.4%) believed codeine products should not be sold without prescriptions, males were more likely to dispense upon request $\chi^2(1, N =$ 260) = 9.894, p = 0.007. Pharmacists recognized the abuse potential of tablets (68.5%) and syrups (96.2%), and 60.8% stored products in dispensaries, away from the customers' direct reach. Pharmacists (86.5%) reported having repeat customers, with 77.3% requesting multiple bottles of syrup. The average number of repeat customers requesting codeine products was 5.8 \pm 5.4, and this did not differ significantly by the location of the community pharmacy (p > 0.05). Most (76.9%) believed that legislation is required to limit the sale of OTC codeine-based products.

Conclusion: Continuing education can enhance protective dispensing practices. The high prevalence of repeat customers suggests potential abuse, requiring monitoring strategies and legislation to protect public health.

09

Metagenomics Reveals Hidden Arboviral Diversity and First Reports of Caaingua and Pacora Viruses in Trinidad

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Objective: To use metatranscriptomics for virus genomic characterization without *a priori* knowledge for arbovirus detection in mosquitoes from Trinidad.

Methods: As part of a longitudinal passive mosquito surveillance effort, four CO2-baited CDC light traps were used to collect mosquitoes from two trapping sessions in June and September 2023 in Talparo (Central Trinidad). The site consisted of forested areas with residential and agricultural developments. Metatranscriptomics of RNA from pooled mosquitoes was done on the ONT GridION sequencer. An in-house bioinformatic pipeline was used to identify mosquito vectors and viral sequence diversity.

Results: A total of 575 mosquitoes were collected in June (Culex spp. (n=325), Haemagogus janthinomys (n=8), Psorophora albipes (n=41), Sabethes sp. (12), Total=386) and September (Culex spp. (n=129), Ochlerotatus sp. (n=24), Psorophora sp. (n=36), Total=189). Most viruses were insect-specific and from the following families: Mesoniviridae, the Riboviria group, Orthomyoxoviridae, Flaviviridae, Peribunyaviridae, Phenuviridae, and Rhabodoviridae. Three viruses of interest were identified from Culex sp. mosquitoes. Of these, Caaingua virus (Alphavirus) and Pacora virus (Orthobunyavirus) were detected for the first time in Trinidad. Caaingua virus is most closely related to Venezuelan and Eastern equine encephalitis viruses and can infect human mononuclear cells. Pacora virus is related to the Guama virus group, which includes human and animalinfecting orthobunyaviruses, and Oropouche virus. The third, a novel *Phlebovirus sp.*, is closely related to *Itapo*ranga virus (Phlebovirus) originally reported in Culex sp. mosquitoes in Trinidad in the 1960's. It is also similar to other human-infecting phleboviruses (57% RNA-dependent RNA polymerase similarity) and has demonstrated potential to infect animals.

Conclusions: While there is currently no evidence of human infections by these three viruses in Trinidad, their detection highlights gaps in our knowledge about circulating viruses, the importance of arboviral surveillance, and the utility of metatranscriptomic sequencing to identify known and potentially novel viruses.

O10

Antibiotic Prophylaxis in Surgical Patients: A Retrospective Analysis at a Secondary Hospital in Trinidad and Tobago

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Objective: To assess the prescribing patterns and antibiotic use across various surgical departments at the Sangre Grande Hospital Campus (SGHC), under the Eastern Regional Health Authority (ERHA).

Methods: A retrospective study was conducted from January 2024 to April 2025. Two hundred and thirty-five patient records were collected over 14 months. Records were selected randomly by ERHA staff, from existing records. Inclusion: aged ≥18 years, patients undergoing day, emergency, or elective procedures, received pre-operative antibiotic prophylaxis, listed in records. Exclusion: multiple surgeries, active infection prior, critically ill or immunocompromised patients. The sample size calculated was 235 using the Raosoft® sample size calculator, with the significance set at p < 0.05. Data included demographics, surgical category, type and route of antibiotics administered, duration of hospital stay, and use of microbiological testing. Antibiotics were classified using the World Health Organization (WHO) "AWaRe" framework. Surgical Site Infections (SSIs) were identified retrospectively. Laboratory culture results were also examined. The study thus looked at the prevalence of antibiotic use and the SSI PR. SSI PR (%) = (Number of patients with documented SSI / Total number of surgical patients in the sample) ×100. Data was presented using descriptive statistics.

Results: The response rate was 235 (100 %). Ages ranged from over 60 to <20 years. Among the patients' records reviewed, 52.8% were female and 47.2% were male. General surgery accounted for the majority of procedures (74.5%). Antibiotic prophylaxis was administered in 225

(85.1%) of cases, with 62.2% from the WHO "Access" and 37.8% from the "Watch" categories. Augmentin (44.4%), Ceftriaxone (25.3%), and Metronidazole (17.3%) were the most frequently used antibiotics. Antibiotics were most frequently delivered intravenously (IV) (66%). Only four (4) patients (1.7%) had microbiological cultures requested, despite the availability of susceptibility testing. The SSI rate was 0.43%.

Conclusion: There was a low SSI rate, but the use of "Watch" and IV antibiotics with minimal use of the microbiology services was concerning. The findings highlighted the need to improve antibiotic stewardship.

011

Intersecting Climate and Health Crises: Socioeconomic Determinants of Dietary Resilience in Post-Pandemic, Post-Hurricane Grenada

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Objective: This study investigates how socioeconomic and demographic factors shaped household dietary resilience in Grenada following compounded disruptions from the COVID-19 pandemic and Hurricane Beryl (July 2024).

Methods: A community-based survey (N=390) was conducted across all parishes of Grenada using stratified random sampling proportional to parish population size. Data were collected regarding pre- and post-pandemic food consumption, and before (2024) and after (2025) Hurricane Beryl. Variables included household composition (size, gender distribution, age categories, and monthly income), food expenditure, meal frequency, and dietary variety. A Balanced Diet Scale (BDS) was created from core food groups and unhealthy food indicators. Socioeconomic status (SES) was measured using a composite index of education, employment, and food spending. Paired t-tests compared pre- and post-crisis changes in meal frequency and BDS;

McNemar's test assessed categorical dietary behaviours; multiple linear regression identified predictors of resilience. **Results:** Meal frequency (t (299) =7.80, p<.001) and the BDS (t (299) =2.43, p=.016) declined significantly across crisis periods. McNemar's test showed reduced fruit and protein intake with shifts toward carbohydrate staples (p<.01). SES was a positive predictor of BDS (β =0.41, p=.002), while older age (>50 years) was protective (β =1.11, p=.046). Larger households (≥5 members, particularly those with monthly incomes <EC\$2,000) showed marginally greater declines, while gender alone was non-significant after SES adjustment.

Conclusions: Higher SES and older age buffered dietary resilience, whereas larger, low-income households were more vulnerable. The convergence of the COVID-19 pandemic and Hurricane Beryl amplified socioeconomic disparities, underscoring the need for integrated nutrition, climate adaptation, and social protection policies in climate-vulnerable Small Island Developing States.

012

Food Consumption Patterns of Diabetics in Urban and Rural Communities in Trinidad

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Objective: To compare food consumption patterns of diabetics resident in urban and rural areas of Trinidad.

Methods: A survey was conducted comprising diabetic patients aged 18 and older, who were enrolled at urban and rural health centres in East and South Trinidad during their medical visits. After obtaining ethics approvals and informed consent, data were collected using an interviewer-administered questionnaire and analysed using chi-square tests and multiple logistic regression.

Results: The study comprised 567 patients, with 302 (53.3%) residing in rural communities. The response rate was 98.1%. Most participants were 60 years and older (66.3%), female (64.7%), and diabetics for more than 10 years (55.2%). Daily consumption from the six food groups included staples (68.4%), foods from animals (52.4%), vegetables (50.3%), fruits (49.9%), legumes (30.7%), and fats/oils (73%). Only 44.8% of participants had a daily intake from 4 to 6 food groups. More patients from rural areas consumed fats/oils daily (80.1%) compared with urbanites (64.6%) (p <0.001). There were no other rural-urban differences in daily food group consumption. The logistic regression analyses indicated that sex and ethnicity were independent predictors of consumption of 4 or more food

groups daily, while age, education, and occupation were not. Females were more likely to consume foods from 4-6 food groups than males (Odds Ratio (OR) = 2.04; 95% CI, 1.41, 2.95; p = <0.001). East Indians were also more likely to have diets comprising 4-6 food groups compared with Africans (OR = 2.76; 95% CI, 1.79, 4.26; p = <0.001).

Conclusions: There were few differences in food consumption between urban and rural diabetics; less than half of the sample consumed at least 4 of the 6 Caribbean food groups daily. Further research is needed to elucidate the reasons for these findings and inform interventions to improve food consumption patterns among persons with diabetes mellitus.

013

Clinical, Reproductive, and Psychological Features among Women with and without Ultrasound-Confirmed Polycystic Ovary Syndrome in Trinidad

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Objective: To assess clinical, reproductive, dermatologic, and psychological differences between women with and without Polycystic Ovary Syndrome (PCOS) in Trinidad. Methods: A cross-sectional survey was conducted among 308 women aged 18-45 years old, recruited online using convenience sampling. Data were collected via Zoom/ WhatsApp interviews using a 54-item structured questionnaire covering demographics, menstrual and reproductive history, dermatologic features, and mental health. PCOS status (CONFIRMED-PCOS, PROBABLE-PCOS, or No-PCOS) was classified based on self-reported ultrasound diagnosis using the National Institutes of Health (NIH) 1990/2023 International Guidelines. Mean group differences were compared using ANOVA or Kruskal-Wallis test and Pearson's χ^2 test for continuous and categorical variables respectively.

Results: Of 308 respondents, 43 (14%) had CONFIRMED-PCOS, 13 (4%) PROBABLE-PCOS, and 252 (81%) No-PCOS. The mean age was 28.9±8.7 years and mean BMI 26.4±7.5 kg/m², with PCOS women significantly younger (24.2 vs. 29.8 years, p=0.006). There were no significant differences in BMI, education, lifestyle habits (alcohol use, smoking, exercise), or ethnicity. PCOS was associated with longer menstrual cycle length (p=0.009) and more irregular bleeding (67% vs. 21%, p<0.001). Compared with No-PCOS, those with CONFIRMED-PCOS showed high prevalence of dermatologic features (acne (~4 times), alopecia (~7 times), and acanthosis (~3 times)), fewer live births (p=0.002), and greater contraceptive use (~9 times, p<0.001). Depression severity strongly tracked with PCOS, with odds of depression rising nearly tenfold for mild and over twentyfold for severe cases of depression (all p<0.001). Probable-PCOS (4%) showed marked androgenic features despite similar BMI and lifestyle: the highest hirsutism scores (FG median=10) and significantly greater odds of alopecia (\sim 7×) and acanthosis (\sim 3×) compared with No-PCOS. Metformin use was enriched (OR 5.16, p=0.007) while contraception and cycle length resembled No-PCOS; the depression signal was driven by severe symptoms (OR 28.1, p=0.002).

Conclusions: Ultrasound-confirmed PCOS in Trinidad was associated with significant menstrual, reproductive, dermatologic, and mental health burdens despite similar BMI, lifestyle, and sociodemographic profiles. These findings highlight multisystem expression of PCOS and underscore the need for holistic clinical assessment that considers both physical and psychological dimensions of the syndrome.

O14

Anticancer Potential of Muscadine Grape Skin Sub-Fractions: Cytotoxicity and Effect on Cell Cycle Progression of Human Tumour-Derived Cells

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Objective: Cancer, a leading non-communicable disease globally, accounts for high morbidity and mortality in Trinidad and Tobago. This study investigated the potential of muscadine grape *Vitis rotundifolia* sub-fractions in the search for novel anticancer compounds.

Methods: Dichloromethane extract was partially purified via preparative thin-layer chromatography to yield five chemically distinct sub-fractions (S1-S5), which were screened for cytotoxic effect against PC-3 (prostate), A549 and H1299 (lung), and MDA-MB-231 and MDA-MB-468

(breast) cancer cells using the MTT assay. Concentrations inhibiting 50% of cell growth (IC50) were calculated from dose-response curves using GraphPad Prism. The Selectivity Index (SI) was determined on non-tumourigenic HaCaT keratinocytes. Effects of S1-S3 on unsynchronized PC-3 and A549 cell cycle progression (G1, S and G2 phases) at 24h and 48h were analysed by flow cytometry using FlowJo software, following propidium iodide staining.

Results: S1-S3 displayed broad-spectrum cytotoxicity (IC50 < 90 μ g/mL) against all tested cell lines at 72h. S3 exhibited high potency against both PC-3 cells (IC50 = 2.01 μ g/mL) and A549 cells (IC50 = 6.11 μ g/mL). However, selectivity was observed only in PC-3 cells (SI = 2.47). Overall, S1-S3 negatively affected the S-phase, irrespective of the cell line. In PC-3, S1 (40 μ g/mL) induced arrest in G1 at 48h with 28% more cells as compared to the untreated control (50%), accompanied by reduction of the S-phase by 22%. In contrast, both S2 (40 μ g/mL) and S3 (20 μ g/mL) promoted G2 block with 12% and 8%, respectively. In A549, S1-S3 caused G1 arrest. When tested at 20 μ g/mL, S3 was the most effective sub-fraction, resulting in 21% increase of G1 at 24h, followed by S2 (17% increase), whose effect remained stable at 48h.

Conclusions: Muscadine grape skin sub-fractions S1-S3, based on their potent cytotoxicity and ability to disrupt cancer cell cycle progression, emerge as candidates for development into plant-based anticancer therapeutics.

015

Alcohol Consumption Patterns and Associated Substance Use Practices among Undergraduate Students at The University of Trinidad & Tobago

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Objective: To determine alcohol consumption patterns and their associations with substance-use practices among undergraduate students (aged 18-25) at the University of Trinidad & Tobago.

Methods: A cross-sectional study utilizing a multi-stage sampling strategy was employed and 524 students were recruited with a response rate was 92%. The questionnaire used incorporated the Alcohol Use Disorder Identification Test (AUDIT). Substance-use practices examined included tobacco and marijuana smoking, e-cigarette and illicit drug use. Data analysis in SPSS 30.0 and JASP 0.19.3 involved sample proportions and percentages, Chi-Square tests, crude and adjusted odds ratios (OR and AOR), binary logistic regression, and the Kruskal-Wallis test.

Results: Current alcohol use (55.2%) was significantly associated with peer alcohol use (AOR = 3.99; 95% CI: 1.89,

8.42), household alcohol consumption (AOR = 2.40; 95% CI: 1.46, 3.93), and minority religions (AOR = 3.41; 95% CI: 1.16, 10.0), while being single significantly reduced the odds (AOR = 0.50; 95% CI: 0.32, 0.77). Reported 12-month negative effects of alcohol use included hangovers (36.8%), unprotected sex (20%), impaired driving (15.5%), and interpersonal conflicts (15.1%). Prevalence of polysubstance use was 22.3%. A median AUDIT score of 2 with no significant differences across campuses (H = 12.204, p = 0.142) was observed. 14.2% of students drank at harmful levels (AUDIT scores >7), with higher odds ratio for concurrent tobacco smoking (OR = 6.51; 95% CI: 3.25, 12.65), e-cigarette use (OR = 5.88; 95% CI: 3.33, 10.38), marijuana smoking (OR = 5.59; 95% CI: 3.02, 10.34), and illicit drug use (OR = 11.08; 95% CI: 4.15, 30.06).

Conclusion: Social environments and relationships are associated with current alcohol use among undergraduate students. Harmful drinking observed in students, is strongly associated with polysubstance use, highlighting the need for integrated interventions and targeted health promotion to address identified risky behaviours such as unprotected sex and impaired driving.

O16

Prevalence of Peripheral Neuropathy and Association between Cardiovascular Disease and Adult Non-Diabetic Peripheral Neuropathy (NDPN) in Trinidad

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Objectives: To determine the prevalence of non-diabetic peripheral neuropathy (NDPN) and the association between cardiovascular disease (CVD) and adult NDPN in Trinidad. **Methods:** In this quantitative cross-sectional study, grounded by the socioecological model, we employed convenience sampling. Participants were from eight private medical practices in the Southwestern part of Trinidad. Following informed written consent, data were collected using a modified Douleur Neuropathique 4 (DN4) survey questionnaire. Participants completed anonymized hard copies. The target group consisted of patients 18 years and older and the estimated sample size was 314, but 319 participants responded and were included in the analysis. Primary data were analysed using binary logistic regression in SPSS.

Results: Females constituted 63.4% and males 36.6%. Participants aged 18 to 49 years constituted 45.9%, 50 to 79 years were 51.1%, and 80 years and overrepresented 3%. The dependent variable was NDPN the independent variable was CVD, and the covariates were income, smok-

ing, alcohol, age, gender, and ethnicity. The prevalence of NDPN was 21.5%, while diabetic PN (DPN) was 38.1%. CVD was associated with NDPN (odds ratio [OR], 5.47, p < 0.05, 95% CI: 1.61–18.60). Controlling for the other variables, older adults had an increased risk of NDPN (OR, 2.70, p < 0.05, 95% CI: 1.36–5.34). CVD was associated with age (OR, 4.69, p < 0.05, 95% CI: 1.67–13.14). The other co-variates were not associated with NDPN.

Conclusion: The prevalence of NDPN was quite high at 21.5%, when compared to the prevalence of 11.6% found among adults not suffering from diabetes in the United States. People with nNDPN should be adequately managed. Older patients with NDPN should be screened for CVD, and vice versa. Based on the socioecological model, the association between NDPN, CVD, and age could be due to the complex interaction between participants and their social and physical environment.