### Living Healthy at All Ages

Chairpersons: S Keizer-Beache, J Hospedales

### 0 - 36

Uropathogens isolated in the population of St Vincent and the Grenadines: A survey and analysis of the organisms and antimicrobial resistance patterns exhibited between October 2013 and October 2015

P Haftkowycz, D Santhosh, T Stanco, K Tehrani Saint James School of Medicine, Arnos Vale, St Vincent and the Grenadines

E-mail: dsanthosh@mail.sjsm.org

**Objective:** This study researched data which are currently unavailable in the literature regarding the uropathogens and antimicrobial resistance of urinary tract infections in St Vincent and the Grenadines for the purpose of providing local practitioners with up-to-date information for their decisions for treatment regimes.

**Subjects and Methods:** Through a retrospective review of data available from WHONET located at the microbiology laboratory of Milton Cato Memorial Hospital in Kingstown, St Vincent and the Grenadines, all uropathogens and antibiotic resistance information was collected for the period October 2013 to October 2015. The study population included all urine samples with a clinically significant growth of greater than 10<sup>5</sup> CFU/mL, indiscriminant of age, gender, co-morbidities or referral status.

**Results**: Out of the 752 urine specimens, 850 isolates from 50 different bacterial species were found. The most common Gram-negative isolates were *Escherichia coli* at 35%, followed by *Klebsiella pneumoniae* at 18%, *Pseudomonas aeruginosa* at 5% and *Proteus mirabilis* at 4%. At the top of the Gram-positive isolates was *Enterococcus* species at 3%. Antibiograms showed resistance to varying degrees for each of these five isolates.

**Conclusions:** Treatment of urinary tract infections with antibiotics in St Vincent and the Grenadines represents complex decision-making which can only be successfully navigated with appropriate laboratory testing.

### 0 - 37

Prevalence of dementia in persons 70 years old and above in Trinidad

N Baboolal, G Davis, A McRae, R Stewart The University of the West Indies, Faculty of Medical Sciences, St Augustine, Trinidad and Tobago; King's College London, University of London, London, UK E-mail: Nelleen.Baboolal@sta.uwi.edu

**Objective:** Trinidad and Tobago has an ageing population with a high prevalence of diseases, which are risk factors for dementia. This study investigated the prevalence of dementia in Trinidad.

**Subjects and Methods:** The prevalence of dementia study used validated 10/66 interview protocols. Two thousand individuals 70 years old and above were recruited. The dementia survey was carried out in age stratified groups (70–79, 80–89 and persons 90 years and above). SPSS 20 was utilized to randomly select 120 electoral districts (ED) and each ED was enumerated by going door-to-door identifying households with persons 70 years and older for inclusion.

**Results:** Of the 1898 participants, the modified 10/66 dementia algorithm produced output in 1590 (83.8%). Dementia was present in 358 (22.5%). There were 56.1% females and 43.9% males. The mean age was  $77.9 \pm 6.3$  years, range 70-102 years. Dementia was found in 12% of persons aged 70-74 years, 23.7% in 75–79 years, 26.1% in 80–84 years, 41.3% in 85–89 years and 57.7% in persons 90 years old or older. Of all persons with dementia, 47.5% had no education, 24.1% primary, 11.3% secondary and 6.1% tertiary. Dementia was present in 22.8% of males and 25.3% of females and in 26.9% of persons of East Indian descent, 24.5% of African descent and 16.3% of mixed descent. Fifty per cent of persons with strokes had dementia.

**Conclusions:** Trinidadians 70–89 years have a dementia prevalence higher than has been reported anywhere else in the world. Dementia prevalence is as expected in the 90+ age range. Dementia prevalence is strongly associated with increased age, level of education and vascular risk factors.

### 0 - 38

# Chronic disease and health profile of the elderly in Trinidad in 2014

G Davis, N Baboolal, A La Foucade, K Theodore, A McRae, R Stewart

Faculty of Medical Sciences, Faculty of Social Sciences, The University of the West Indies, St Augustine, Trinidad and Tobago; King's College London, London, UK E-mail: gershwin.davis@sta.uwi.edu

**Objectives:** Trinidad and Tobago is a country undergoing a demographic transition, with increasing numbers in the older age groups. Data in this population are essential for robust administration of limited resources. Our objective was to estimate the prevalence of chronic disease, impairment levels and limitations to activities of daily living in an elderly cohort in Trinidad

**Subjects and Methods:** All individuals 70 years old and older in 120 enumeration districts were invited to participate. The sample was selected using stratified random sampling with proportional allocation to each stratum. In this case, the strata comprised the various municipalities. All 1828 individuals who participated were interviewed and administered a questionnaire.

**Results:** There were 56.1% females and 43.9% males in the study. The mean age was  $77.9 \pm 6.3$  years, range 70-102 years. The most common self-reported chronic disease condition was hypertension (46%), followed by arthritis (32.8%) and diabetes (32.2%). Among the diabetic patients, 78.5% reported some form of eyesight impairment and in 5.8% of them, it was severe. The commonest instrumental activity of daily living that was affected was the ability to shop independently; this was followed by inability to commute independently. Of the elderly population, 22% had two of the three chronic conditions of hypertension, diabetes or heart disease.

**Conclusion:** This study provides insight into the current perceived state of health of the elderly population. The high levels of multiple chronic diseases and impairment in the increasingly ageing population has implications for cost and effective strategies for healthcare intervention and delivery.

### 0 - 39

Acute pancreatitis at the University Hospital of the West Indies, Kingston, Jamaica – A seven-year retrospective review

GP Reid, EW Williams, DK Francis, MG Lee Emergency Medicine Division, Department of Surgery, Radiology, Anaesthesia and Intensive Care; Epidemiology Research Unit, Tropical Medicine Research Institute, The University of the West Indies, Kingston, Jamaica; Department of Medicine, University Hospital of the West Indies, Kingston, Jamaica

E-mail: gpoc1@yahoo.com

**Objective:** Acute pancreatitis is a significant cause of morbidity; however, there is a dearth of regional studies. This study seeks to describe the epidemiological profile, risk factors, clinical presentation and outcomes of patients with acute pancreatitis at the University Hospital of the West Indies (UHWI).

**Subjects and Methods:** All patients with a diagnosis of acute pancreatitis admitted at the UHWI between 2006 and 2012 were retrospectively reviewed. The 2012 revised Atlanta Classification was used to determine the case definition. Statistical analyses were performed using SPSS 16.0 for Windows.

**Results:** There were 70 females and 21 males with a median age of 44 years (range 2–86 years). The median age of males was higher than that of females (p=0.041). The incidence was 74 per 100 000 admissions per year. The most common aetiology was related to biliary disease (71.4%), followed by idiopathic (12%), post-endoscopic retrograde cholangiopancreatography (ERCP; 6.6%) and alcoholic induced (5.5%). The mean duration of hospitalization was  $9.51 \pm 8.28$  days. Disease severity was mild in 61.1%, moderately severe in 26.7% and severe in 12.2% of patients. Factors associated with more severe disease included overweight/obesity, idiopathic aetiology and post-ERCP status. The case fatality rate was 2%.

Conclusions: This is the first known detailed regional description of acute pancreatitis. There was a female preponderance in this study. Biliary disease was the most common aetiology and most cases were clinically mild. Clinical management protocols for use in hospitals in Jamaica and the Caribbean should target timely definitive interventions in order to decrease morbidity and its economic impact.

### O - 40

# Assessment of perspectives and approaches to antimicrobial resistance in Grenada

LM Glasgow, S Fletcher, O Gabriel, M Forde Ministry of Health, St George's, Grenada; Public Health Unit, South Western Sydney Local Health District, Liverpool, Australia; Department of Oncology, Victoria Hospital, Castries, St Lucia; Department of Public Health and Preventive Medicine, St George's University, St George's, Grenada

E-mail: martinforde@mac.com

**Objectives:** To assess Grenada health practitioners' perspectives on antimicrobial usage, knowledge and practices.

**Subjects and Methods:** A cross-sectional survey of physicians, pharmacists and laboratory technicians was conducted to elicit their perspectives on and approaches to antimicrobial resistance (AMR) in Grenada.

**Results:** Data from 34 physicians (44.2%), 12 pharmacists (75.0%) and three laboratory technicians (100.0%) were analysed. There were notable differences in perspectives, with 60.6% of physicians reporting AMR was not a problem while 41.7% of pharmacists believed AMR was a national problem and all laboratory technicians reported uncertainty. Physicians mostly felt the level of knowledge by practitioners was average (64.7%), while pharmacists felt it was average (41.7%) or low (50.0%). Most physicians (82.4%) and all surveyed pharmacists and laboratory technicians were unaware of recent AMR campaigns. For antibiotic information, the Internet was most used by physicians and pharmacist (52.9%, 58.3%) with guidelines from the Ministry of Health least used (8.8% by physicians). Five key factors identified by physicians and pharmacists to have contributed to AMR are: patients failing to adhere to treatment (70.6%, 91.0%), patients demanding antibiotics (61.8%, 63.6%), prescribing antimicrobials unnecessarily (55.9%, 54.5%), insufficient patient advice about antibiotics (55.9%, 54.6%) and limited use of laboratory services for diagnosis (47.1%,

**Conclusions:** This study highlights a gap in knowledge amongst physicians, pharmacists and laboratory technologists on several key issues related to AMR. There is need for healthcare practitioners to be properly trained and guided on which practices and policies will lead to a minimizing of this problem within their healthcare settings.

### O - 40 A

Human immunodeficiency virus testing behaviours in a Turks and Caicos Islands sample

SD Malcolm, A Robinson Ministry of Health, Grand Turk, Turks and Caicos E-mail: Shandmal@gmail.com

**Objective:** To examine factors associated with human immunodeficiency virus (HIV) testing in a general Turks and Caicos Islands (TCI) sample.

Methods: Participants were respondents of the 2011 Knowledge, Attitudes, Practices and Behaviours survey (n = 775; 54% female; mean age = 32.3 [STD = 8.8]). Multivariate logistic regression was used to examine the association between ever tested for HIV (Yes/No) and three types of factors: demographic factors (age and gender), sexual behaviours (number of partners and condom use) and receipt of HIV information (ever told about HIV, knowledge about treatment, media sources and healthcare sources of HIV information). In addition, participants who indicated that they never had an HIV test were asked the reason for non-testing.

**Results:** Seventeen per cent of the study sample had never tested for HIV. Logistic regression revealed that having had an HIV test was related to older age (OR = 1.08, 95% CI = 1.05, 1.13), female gender (OR = 2.15, 95% CI = 1.29, 3.59), knowing that treatment exists (OR = 3.85, 95% CI = 2.08, 7.13), having been told of HIV (OR = 4.35, 95% CI = 1.47, 12.94) and having been educated about HIV from healthcare providers (OR = 4.0, 95% CI = 1.9, 8.3). The most common reasons for not testing were having safe sex (24.8%), not having HIV (22.6%) and not thinking about it (21.8%).

**Conclusion:** Human immunodeficiency virus testing campaigns and interventions should pay special attention to groups that are less likely to test for HIV, as a targeted strategy may be most effective in resource-limited TCI.