# **Clinical Studies II**

Chair: R Wilks and M Tulloch-Reid

#### (O - 07)

### An evaluation of depressive symptoms and stress among doctors who work in intensive care units in Jamaica

# S Curtis, K Ehikametalor, M Scarlett, H Harding-Goldson, J Sutherland

Department of Surgery, Radiology, Anaesthesia and Intensive Care, Faculty of Medical Sciences, The University of the West Indies, Kingston 7, Jamaica

**Objective:** To assess the prevalence of depressive symptoms among physicians who work in intensive care units (ICUs) in Jamaica and to determine the work-related causes.

**Methods:** A multi-centre, cross-sectional survey using two validated self-administered questionnaires, the Firth-Cozens and Beck Depression Inventory-II (BDI-II), was conducted amongst anaesthetists working in the ICU at the University Hospital of the West Indies, Kingston Public Hospital, Cornwall Regional Hospital and the Bustamante Children's Hospital. Data were stored and analysed using the SPSS version 19. The K-S and Levene's test were performed to assess skewness and homogeneity of variances, respectively. Group differences were explored using parametric tests.

**Results:** The response rate was 98% with two-thirds being 25–34 years old; 66.2% female and 40% single. Moderate to severe depressive symptoms were uncommon (2.5%), but 97.5% (78) had mild depressive symptoms. High stress levels were also associated with limited facilities (mean rank =  $4.12 \pm 0.98$ ), inadequate resources ( $3.92 \pm 0.99$ ), compromising of standards ( $3.78 \pm 1.09$ ), and long working hours ( $3.65 \pm 1.16$ ). There were no statistically significant differences in depression levels according to institution (p = 0.125) or staff grade (p = 0.73). Limited control, effort-reward imbalance and lack of social support were contributory. Severity of symptoms were influenced by the length of time spent at work and its impact on the anaesthetists/intensivists' personal, family and/or social life.

**Conclusion:** This study clearly identifies modifiable factors contributing to depressive symptoms in physicians working in ICUs in Jamaica that need to be brought to the attention of administrators and directors of postgraduate training programmes for urgent intervention.

#### **(O – 08)**

A quantitative analysis of lifestyle practices of Jamaican men 40 years and older with prostate cancer: a KAP study

T Dubroy<sup>1</sup>, W Aiken<sup>2</sup>, P Dillard<sup>1</sup>, M Goldmon<sup>1</sup>, N Younger<sup>2</sup>, D Francis<sup>2</sup>, B Morrison<sup>2</sup>, S McFarlane<sup>2</sup>, K Martin<sup>1</sup>, B Banks<sup>1</sup>, J Mapp<sup>1</sup>

<sup>1</sup>Shaw University, Raleigh, North Carolina, United States of America and <sup>2</sup>Department of Surgery, Radiology, Anaesthesia and Intensive Care, The University of the West Indies, Kingston 7, Jamaica

**Objective:** The study examined food, alcohol and smoking consumption in Jamaican prostate cancer (PCa) patients 40 years and older to assist in development lifestyle intervention strategies.

**Methods:** An interviewer-administered questionnaire was used to measure the knowledge, attitudes and practices (KAP) of Jamaican PCa survivors aged 40 years and older. Analysis aimed to identify patterns in practices relating to food, alcohol and smoking consumption among patients, pre- and post-diagnosis.

**Results:** Two hundred and thirty-nine PCa patients were recruited from private clinics and public hospitals. Forty-one per cent consumed mostly chicken, while 13% and 12% consumed fish and red meat, respectively, prior to diagnosis. Lower consumption rates were reported for ackee and saltfish (9%) and fruits and vegetables (3%). Sixty per cent of patients did not change their meat preparation method post diagnosis. Of the forty per cent that changed their meat preparation habits, 53% still preferred fried meat. Of the twenty-five patients (13%) who were current alcohol consumers, beer and rum were among the most frequently consumed sources. Majority of patients (90%) did not smoke.

**Conclusion:** Although a minority of patients reported being smokers or consumers of alcohol, the majority did not change their dietary habits post-diagnosis. More should be done to guide patients on more healthful meat preparation methods.

#### (0 - 09)

### Educational health disparities in cardiovascular disease risk factors in Jamaica: findings from the Jamaica Health and Lifestyle Surveys

TS Ferguson<sup>1</sup>, NO Younger-Coleman<sup>1</sup>, MK Tulloch-Reid<sup>1</sup>, IR Hambleton<sup>2</sup>, MY MacLeish<sup>3</sup>, AJ Hennis<sup>1</sup>, RJ Wilks<sup>1</sup>, EN Harris<sup>4</sup>, LW Sullivan<sup>5</sup> for the US-Caribbean Alliance for Health Disparities Research (USCAHDR) Investigators <sup>1</sup>Epidemiology Research Unit, Tropical Medicine Research Institute, The University of the West Indies, Kingston 7, Jamaica, <sup>2</sup>Chronic Disease Research Centre, Tropical Medicine Research Institute, The University of the West Indies, Bridgetown, Barbados, <sup>3</sup>Department of Medical Education, Morehouse School of Medicine, Atlanta, United States of America, <sup>4</sup>The University of the West Indies, Kingston, Jamaica, West Indies and <sup>5</sup>The Sullivan Alliance, Alexandria, United States of America

**Objectives:** To estimate disparities in cardiovascular disease (CVD) risk factors (hypertension, diabetes mellitus, hypercholesterolemia and obesity) by education categories among 15–74-year old Jamaicans.

**Methods:** We analysed data from the two Jamaica Health and Lifestyle Surveys (2000–01 [JHLS-I] and 2007–08 [JHLS-II]). Trained research staff administered questionnaires and obtained measurements of blood pressure, anthropometrics, glucose and cholesterol. Cardiovascular disease risk factors were defined by internationally accepted cut-points. Educational levels were classified as primary or lower, all-age/junior high, secondary and postsecondary. Gender-specific estimates of disparity were computed using differences in age-adjusted prevalence of CVD risk factors across educational categories, the index of disparity and the between group variance.

**Results:** Analysis included 1322 women and 676 men from JHLS-I and 1961 women and 887 men from JHLS-II. Among men, there were significant differences in the age-adjusted prevalence of overweight and obesity by education in JHLS-I and for obesity in JHLS-II. Using the index of disparity, the largest disparity among men was seen for obesity (131.4 in JHLS-I and 222.8 in JHLS-II). Among women, significant differences in disease prevalence by educational categories was seen only for diabetes in JHLS-I. The largest index of disparity among women was for diabetes (325.4 in JHLS-I and 46.4 in JHLS-II). Disparity patterns using the between group variance were generally similar to that seen for the index of disparity.

**Conclusion:** Educational health disparity in Jamaica is largest for overweight, obesity and diabetes mellitus. Except for diabetes in JHLS-I, educational health disparities appear to be larger in men than women.

#### (0 - 10)

# Health-seeking behaviours of Jamaican men age 40 years or older with prostate cancer

N Weeks<sup>1</sup>, A Banks<sup>1</sup>, L Kienka<sup>1</sup>, P Dillard<sup>1</sup>, T Dubroy<sup>1</sup>, M Goldmon<sup>1</sup>, N Younger<sup>2</sup>, D Francis<sup>2</sup>, S McFarlane<sup>2</sup>, W Aiken<sup>2</sup>

<sup>1</sup>Shaw University, Raleigh, North Carolina, United States of America and <sup>2</sup>Department of Surgery, Radiology, Anaesthesia and Intensive Care, The University of the West Indies, Kingston 7, Jamaica

**Objective:** This study examines demographics and the health-seeking behaviours of Jamaican prostate cancer survivors.

**Methods:** A cross-sectional study was conducted of knowledge, attitudes and practices (KAP) of Jamaican men with a confirmed prostate cancer (PCa) diagnosis at selected public and private urology clinics. Responses to a series of questions from the interviewer-administered KAP questionnaire were analysed to assess health-seeking behaviours.

**Results:** Eighty-seven per cent of PCa survivors (n = 239) reported having annual prostate cancer check-ups and 88% had prostate-specific antigen (PSA) tests performed more than once yearly. Eighty-four per cent of PCa survivors reported having primary relatives with the disease. Of the fathers, 71% reported having informed their sons about prostate cancer. Forty-one per cent of patients reported that their doctor advised them about advantages and disadvantages of PSA testing and 11% indicated that they had received community disseminated prostate cancer information. Only 25% of participants had foreknowledge of PCa before being diagnosed. These participants reported most commonly receiving the information about PCa from TV/radio (31%), friends (21%) and newspapers (16%).

**Conclusion:** Participants responding to the KAP survey exhibited positive health-seeking behaviours including annual PCa check-ups and twice-yearly PSA testing. A high proportion had primary relatives with cancer; however, the vast majority of participants reported no foreknowledge of prostate cancer before diagnosis. These results highlight the need for greater dissemination of information about PCa to increase screening and earlier disease detection. They further suggest that TV and radio messaging encouraging PCa survivors to speak with close relatives may be among the most effective outreach strategies.

#### (0 - 11)

# Prostate cancer knowledge of Jamaican men age 40 years or older diagnosed with prostate cancer

W Aiken<sup>1</sup>, P Dillard<sup>2</sup>, T Dubroy<sup>2</sup>, M Goldmon<sup>2</sup>, N Younger<sup>1</sup>, D Francis<sup>1</sup>, B Morrison<sup>1</sup>, S McFarlane<sup>1</sup>

<sup>1</sup>Department of Surgery, Radiology, Anaesthesia and Intensive Care, The University of the West Indies, Kingston 7, Jamaica and <sup>2</sup>Shaw University, Raleigh, North Carolina, United States of America

**Objective:** This study examined prostate cancer-related knowledge of Jamaican prostate cancer survivors.

**Methods:** A cross-sectional study was conducted of knowledge, attitudes and practices of Jamaican men with prostate cancer (PCa) at all major public urology clinics and selected private clinics. Responses to the knowledge-based questions on an interviewer-administered questionnaire were analysed to assess levels of prostate cancer knowledge.

**Results:** Eighty-eight per cent of PCa survivors (n = 225) recognized that PCa is the most common cancer affecting Jamaican men while 72% knew it was the most common cause of male cancer deaths. Fifty-five per cent of men recognized that African ancestry was a risk factor whereas 46% indicated family history increased risk. Seventyseven per cent thought that early PCa resulted in urinary symptoms while 42% believed that only when these were present was a prostate check necessary. Fifty-three per cent identified age 40 years to begin screening for PCa and most men identified the rectal examination as being necessary. There was no difference in PCa knowledge between incident and prevalent cases (p = 0.07). Seventy-five per cent of men reported having no knowledge of prostate cancer prior to diagnosis. The electronic and print media (47%) and friends (22%) were identified as the most common sources of prostate cancer information.

**Conclusion:** There is a deficit in knowledge regarding risk factors, local screening recommendations and general knowledge of PCa among Jamaican PCa survivors. The print and electronic media should be utilized more for dissemination of prostate cancer information since this is identified as the main source of information by participants.

#### (0 - 12)

### Do enuresis and overactive bladder symptoms continue in adults with sickle cell disease?

## BF Morrison<sup>1</sup>, ME Reid<sup>2</sup>, W Madden<sup>2</sup>, AL Burnett<sup>3</sup>

<sup>1</sup>Department of Surgery, Radiology, Anaesthesia and Intensive Care, <sup>2</sup>Sickle Cell Unit, The University of the West Indies, Kingston 7, Jamaica and <sup>3</sup>James Buchanan Brady Urological Institute, Johns Hopkins Medical Institutions, Baltimore, United States of America

**Objective**: We sought to determine if enuresis and overactive bladder (OAB) symptoms that are prevalent in children with sickle cell disease (SCD) persist in adulthood.

**Methods**: Structured questionnaires were administered to 99 persons. Patients attended the Sickle Cell Unit (SCU) at The University of the West Indies and controls were relatives or friends of them. Details of enuresis history were determined. The OAB questionnaire-short form (OAB-q SF) was used to assess bladder symptoms and quality of life.

Results: Sixty-three females and thirty-six males were recruited. Mean  $\pm$  SD age was 28.2  $\pm$  7.9 years, with no difference in age based on genotype. Current episodes of enuresis were reported in three (7.8%) men with homozygous SS SCD. Childhood episodes of enuresis were reported in 30% of the patients, with a significant difference based on SS genotype [AA (15%), AS (11.7%), SS (55.2%)], p < 0.001. Two patients reported primary enuresis continuing to adulthood. There were significantly more current OAB, based on the OAB-q SF in patients with a past history of enuresis compared to those without [median (IQR), 30 (30), 10 (20)], p = 0.03. There were also significantly greater current symptoms of nocturia in patients with a past history of enuresis [median (IQR), 10.3 (3), 1 (1)], p = 0.04. SS genotype was associated with poorer quality of life symptoms on the OAB-q (p < 0.05).

**Conclusions**: Enuresis is not prevalent in adults with SCD. However, there is an association between childhood history of enuresis and OAB symptoms and adults with SCD.