

## Non-communicable Diseases 1

Chairpersons: AL Patrick, G Nicholson

### O – 24

#### All-cause and cervical cancer mortality by ethnicity in Belize, 2008–2010

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**Objective:** To describe social determinants of mortality in Belize.

**Design and Methods:** A cross-sectional descriptive study of mortality utilized the entire Belize population (2010 census data), multiplied by three to correspond with deaths over three years. The International Classification of Diseases (ICD-10) mortality classification of 2008–2010 deaths was used to calculate all-cause, gender and cervical cancer mortality rates. Poisson regression compared death rates between ethnicities, using the largest population group, the Mestizos, as reference.

**Results:** There were 4312 deaths in Belize from 2008–2010. Men had a 40% higher risk of death (incidence risk ratio (IRR) 1.4, 95% CI 1.3, 1.5). Crude death rate was 4.4/1000 population, with highest rates among the dark skinned peoples of the Garifuna (7.9) and Creole (7.5) compared to light-skinned Mestizo (3.2) and Maya (3.3/1000) [ $p < 0.001$ ]. Compared to the Mestizo population, and adjusted for age and gender, Creole all-cause mortality IRR was 2.1 (95% CI 1.9, 2.2) and Garifuna was 2.2 (95% CI 1.9, 2.4). Cervical cancer mortality/100 000 women  $\geq 20$  years was 9.5 ( $n = 42$ ), ranging from 6.3 to 16.1 among the Mestizo and Maya, respectively. The rate for the Garifuna was 7.6. Compared to Mestizo women and adjusted for age, the IRR for cervical cancer mortality was 2.7 (95% CI 1.1, 6.7) and 1.7 (95% CI 0.39, 7.5) in Maya and Garifuna women, respectively.

**Conclusions:** Cervical cancer can and should be managed through screening by Pap smears or VIA (visual inspection with acetic acid) followed by therapy where indicated. The range of mortality rates by ethnicity in Belize indicate that cervical cancer screening and management programmes for Mayan women need to be reviewed and interventions put in place to address the issues found.

### O – 25

#### Rural/urban differences in the clinico-pathologic profiles of Jamaican men with prostate cancer: A comparative retrospective case series

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**Objective:** To compare the clinico-pathologic profiles of urban and rural-dwelling Jamaican men with prostate cancer at initial presentation, examining for differences in age at presentation, prostate-specific antigen (PSA) levels, clinical local tumour stage, Gleason scores and initial treatment selection.

**Design and Methods:** All available medical records of patients diagnosed with prostate cancer attending a private practice outside of Kingston and St Andrew were compared with similar records from a city-based private urologic practice. Patients' age, PSA level at presentation, digital rectal examination findings, biopsy Gleason scores and initial treatment received were recorded and compared for statistically significant differences using bivariate and logistic regression analyses.

**Results:** In unadjusted analyses, rural-dwelling men were older compared to urban-dwelling men (72 *versus* 68.5,  $p = 0.035$ ), had statistically higher median PSA values (22.9 ng/ml *versus* 18 ng/ml,  $p = 0.001$ ), higher local tumour stage ( $p = 0.005$ ), higher mean Gleason scores ( $p = 0.048$ ) and more non-curative initial treatments. Local tumour stage was the only statistically significant difference between rural and urban-dwelling men in logistic regression analysis with rural-dwelling men having a 70% higher risk of non-localized disease (OR = 1.70, 95% CI: 1.03–2.79;  $p = 0.038$ )

**Conclusion:** Rural-dwelling men presented with more advanced prostate cancer compared to urban-dwelling men. Since these men are of similar ethnic/racial composition, it is likely that these differences are due to issues related to access to care, screening practice and awareness of the disease.

## O – 26

### The epidemiology of prostate cancer among men in Western Jamaica

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**Objectives:** (i) To identify sociodemographic and other risk factors associated with the development of prostate cancer (PCa) in western Jamaica, (ii) to identify the knowledge, attitude and practices (KAP) of men regarding prostate cancer screening and complications of prostate cancer, (iii) to identify the health-seeking behaviour of the men and (iv) to identify the men's reproductive health practices.

**Design and Methods:** The design was a matched case-control study with both a qualitative and a quantitative component. Two focus group discussion sessions, one of controls and one with PCa cases, were conducted to qualitatively assess the behaviour of the men. The quantitative portion utilized an interviewer-administered questionnaire to investigate possible risk factors for PCa and the health-seeking behaviour of the men. Two controls were matched to each case. The final sample contained 204 participants – 68 cases and 136 controls.

**Results:** Eighty-one per cent of controls knew that screenings for PCa were available, but a smaller portion reported having been tested (56%). Cases reported being diagnosed by symptoms 61% of the time. Age (odds ratio (OR) 1.97, 95% CI 1.41, 2.74,  $p < 0.05$ ), alcohol use (OR 1.86, 95% CI 1.00, 3.47,  $p < 0.05$ ), and family history (OR 3.39, 95% CI 1.73, 6.66,  $p < 0.05$ ) were identified as being significantly associated with prostate cancer.

**Conclusion:** Populations identified as having low KAP scores and being possible targets for educational interventions included men with family history of PCa and alcohol use. The results also indicated that men were not acting upon their knowledge.

## O – 27

### Prostate cancer knowledge, attitudes and practices among men in Western Jamaica

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**Objectives:** To describe prostate cancer knowledge, attitudes and practices and identify factors associated with prostate cancer screening among men in Western Jamaica.

**Design and Methods:** A questionnaire was administered to 410 men aged 40–93 years. The outcome variable was previous prostate cancer screening.

**Results:** Approximately 35% of the men were previously screened for prostate cancer. Men > 70 years were 93% less likely to be screened compared to men 40–49 years (95% CI: 0.01, 0.56). Men living in the parish of Trelawny were 10.5 times more likely not to be screened compared to men in St James (95% CI: 2.33, 47.7) and non-manual labourers were 5.5 times more likely not to have been screened than manual labourers (95% CI: 0.97, 31.68). Men who had not been advised to have prostate cancer screening were 92% less likely to be screened than those advised (95% CI: 0.02, 0.29). Men who were not sure of how frequently screening should be conducted were 6.1 times more likely not to be screened compared to those who knew that screening should be conducted annually (95% CI: 1.10, 33.35). Men who visit healthcare providers only when they feel sick were 6.4 times more likely not to be screened compared to men who visit annually (95% CI: 1.63, 25.41).

**Conclusions:** A substantial proportion of Jamaican men  $\geq 40$  years had never been screened for prostate cancer. Education on the benefits of annual healthcare visits and prostate cancer screening should be provided.

## O – 28

### Complementary use of herbs and functional foods by cancer patients in Trinidad

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**Objectives:** There is an increasing worldwide trend in the use of complementary and alternative medicines. The purpose of this study was to determine the extent of use of herbs among prostate, breast and colorectal patients at speciality care facilities in Trinidad. We also sought to determine how patients rated the efficacy of this modality, compared with conventional medicines.

**Design and Methods:** A cross-sectional survey was conducted using an interviewer-administered pilot-tested *de novo* questionnaire during the period June to August 2012 at two speciality treatment centres on the island. Data were analysed using  $\chi^2$  and multiple regression analysis.

**Results:** One hundred and fifty cancer patients who used herbs and functional foods were recruited. The most common herb used was soursop (*Annona muricata*) in 80.7% of the sample, and 18% of patients used either wheatgrass extract (*Triticum aestivum*) or noni (*Morinda citrifolia*). Functional foods such as beetroot, carrots,

papaya, cucumber, ginger and garlic were also popular. Although most patients used herbs and functional foods on a daily basis and stated that they would continue use, only 22 patients (14.7%) believed that this modality was more efficacious than conventional therapies to destroy cancer cells.

**Conclusions:** This survey identified the most common herbs and functional foods used among patients diagnosed with prostate, breast and colorectal cancer in Trinidad. Although functional foods may not be problematic, herbs may interact with conventional chemotherapy and physicians need to inform patients regarding probable herb-drug interactions.