

## Non-communicable Diseases 2

Chairpersons: T Maitland, M Reid

### O – 63

#### Assessing violence and injury surveillance in the Caribbean

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**Objective:** To determine the status of existing violence and injury prevention (VIP) efforts and surveillance systems in the Caribbean.

**Subjects and Methods:** The Caribbean Public Health Agency undertook a survey to gather evidence of VIP in 24 member countries. The survey was administered to national epidemiologists and non-communicable disease focal points in October 2015 using an online tool, "Survey Monkey". Questions were asked about the availability in each country of VIP representative surveys, policies, action plans, laws, victim support services and surveillance systems.

**Results:** Nineteen (79%) countries completed the VIP survey. Only three (16%) countries confirmed having undertaken a nationally representative survey. Twelve (63%) had not developed a national policy and 14 (74%) had not implemented an action plan on VIP. Each country reported the existence of VIP laws and offered victim support services, though average enforcement ranged from 40–79%. Nine (47%) countries indicated using an injury registry and 15 (79%) reported collecting injury data with inpatient records, mainly from public hospitals. All 19 countries confirmed that records of reported violent incidents were maintained by the police. Unique identifiers were generally lacking in registries and police systems. Only four (44%) countries with registries, ten (67%) countries with inpatient injury data and 12 (63%) countries with police records indicated sharing data with other organizations.

**Conclusion:** Each country reported some level of injury surveillance system; however, such systems should be harmonized to produce more complete baseline data. The use of unique identifiers is required to reduce duplication and effectively link surveillance systems.

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#### Changes in drug therapy and disease control in a subset of diabetic patients at public primary healthcare facilities in Trinidad

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**Objective:** To determine changes in drug treatment over a five-year period in a subset of diabetic patients who were either uncontrolled on monotherapy or required polypharmacy with or without insulin. These changes were assessed in their ability to be able to achieve glycaemic control.

**Subjects and Method:** A cross-sectional survey was conducted between June and August 2015 at 24 primary healthcare facilities across Trinidad. Demographic details, drug use, blood glucose readings and self-reported adherence to drug therapy, dietary restrictions and exercise were collected. Additionally, patients' files were reviewed for drug changes and blood glucose readings over the previous five-year period.

**Results:** A total of 236 patients were enrolled and 49% had random blood glucose greater than 180 mg/dL (uncontrolled). Most patients (91%) were prescribed metformin or gliclazide (67.5%) either singly or in combination; 92 patients (39%) were prescribed insulin. Over the five-year period, monotherapy declined from 26.9% to 8.4%; conversely, polypharmacy increased from 68.2% to 82.4%. Additionally, doses of all antidiabetic drugs increased. However, despite these changes, only modest decreases in random blood glucose were observed, ranging from 18 mg/dL to 43 mg/dL for the various drug combinations. On average, none of these combinations produced blood glucose levels below 180 mg/dL to achieve glycaemic control.

**Conclusion:** Over the five-year period, there was a shift from monotherapy to polypharmacy, with increasing doses of individual drugs and further addition of insulin. Despite these therapeutic changes, accompanied by moderate

decreases in random blood glucose, they were insufficient to achieve glycaemic control in a significant number of patients.

#### O – 65

##### **Incidence of mesothelioma in Trinidad and Tobago during the period 2009–2014 and the demographic, aetiologic and pathological characteristics of each case**

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**Objective:** To determine the incidence of mesothelioma between 2009 and 2014 and the aetiologic, pathologic and demographic characteristics of each case, and its comparison to the incidence of mesothelioma in the years prior, to determine any changing trends and common features of mesothelioma within Trinidad and Tobago.

**Subjects and Methods:** This study is a retrospective case series study that utilized existing patient records from the Cancer Registry, Death Registry and Chest Unit of the Eric Williams Medical Sciences Complex, Death Registry of San Fernando General Hospital, Death Registry of Port-of-Spain General Hospital, Death Registry of Sangre Grande Hospital and the records of pathologists, private physicians and private hospitals, The data were submitted for analysis using the Statistical Programme for Social Sciences (SPSS).

**Results:** Results from this study show that the incidence of mesothelioma between 1995 and 2007 was 0.891 per million per annum and between 2009 and 2014, it was 1.004 per million per annum. Between 1995 and 2007, mesothelioma was far more common in patients of African descent, was most commonly localized to the pleura, was more common in males and most common in the 45–54-year age group. Between 2009 and 2014, it was more common in females and was evenly distributed amongst all age groups.

**Conclusion:** The incidence of mesothelioma in 2009–2014 of 1.004 per million per annum is higher than the incidence in 1995–2007 of 0.891 per million per annum. Demographic information about mesothelioma showed a higher number of cases in African descents, higher number of female cases in 2009–2014 and a remarkably low survival time after diagnosis.

#### O – 66

##### **Non-communicable diseases in Guyana: Assessing progress in the implementation of World Health Organization global priorities and identifying emerging strategies for prevention and control**

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**Objective:** To assess progress in the implementation of the World Health Organization (WHO) global priorities for non-communicable diseases in Guyana and identify emerging strategies for prevention and control.

**Subjects and Method:** This was a retrospective and qualitative study using document reviews and existing information (literature review) on global priorities and frameworks, national non-communicable diseases and collaborating sector data and reports; and prospective, using focus group discussions and interviews with senior staff of select ministries (Health, Agriculture and Education). Participation in the study was voluntary.

**Results:** The prevalence of non-communicable diseases in Guyana has remained at a high rate over the past decade. Despite improvements in national capacity, leadership and governance, there are still major deficiencies in the implementation of strategies to monitor and reduce these diseases and risk factors, improve research, surveillance, knowledge, policy and service delivery based on the WHO global priorities. Finally, the study highlights the need for greater collaboration between various sectors including health in addressing non-communicable diseases, and advocates for improved national capacity, and a robust primary healthcare system that focusses on health promotion and the social determinants of health.

**Conclusion:** Guyana has made fair progress in addressing non-communicable diseases which remain a national priority but there is need for sustained national commitment, stronger leadership and improved intersectoral mechanisms to reduce the diseases' burden if the WHO global priorities are to be successfully implemented in Guyana.

## O – 67

### Prevalence of major cardiovascular risk factors in urban Suriname: The HELISUR study

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**Objective:** To assess the prevalence of major cardiovascular risk factors among the multi-ethnic population of Suriname, a middle-income country in South America.

**Subjects and Methods:** The Healthy Life in Suriname (HELISUR) study is a cross-sectional study conducted in a random clustered household sample of 1800 participants living in urban Paramaribo. Ancestry was self-defined. Data were collected with the use of questionnaires and physical and laboratory examinations. Height, weight and sitting blood pressure were measured in duplicate. Differences between ethnic groups were tested using  $\chi^2$  tests.

**Results:** Questionnaires were administered to 1800 subjects (mean age: 43 [range 18-71] years). Of this sample, 1159 (65%) participated in the physical examination, including South Asians (34%), Indonesians (9%), Creole (21%), Maroons (19%) and other ancestries (17%). Prevalence of cardiovascular risk factors was 37% for obesity, 40% for hypertension, 15% for diabetes and 11% for hypercholesterolaemia. Except for obesity and hypertension, we found substantial differences in prevalence of risk factors between ancestry groups (all  $p < 0.01$ ). Prevalence of diabetes and hypercholesterolaemia was higher among South Asians and Indonesians compared to Creole and Maroons.

**Conclusion:** We found a high prevalence of cardiovascular risk factors in urban Surinamese participants. Compared to African-Surinamese, Asian-Surinamese showed a more adverse cardiovascular risk profile. Ethnic-specific strategies prioritizing screening and control of cardiovascular risk factors should be developed to safeguard the cardiovascular health of the Surinamese population.

## O – 68

### Leading causes of cancer-specific mortality in the English and Dutch-speaking Caribbean region

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**Objective:** This study examined cancer-related mortality rates among the 21 Caribbean countries that submitted mortality data to the Caribbean Public Health Agency.

**Methods:** We calculated proportions and age-standardized mortality rates (ASMR) by cancer site and gender for each country using the most recent five years of mortality data available from 2003 to 2013. Calculations were completed using SEER\*Stat software and the world (Segi 1960) standard million population.

**Results:** Age-standardized mortality rates for all cancers combined ranged from 46.1 to 139.3 per 100 000. Among males, prostate cancer was the most common cause of cancer deaths in all countries, accounting for 18.4–47.4% of cancer deaths, and an ASMR of 15.1 to 74.1 per 100 000. Lung cancer (4.6–34.0 per 100 000) was the second or third leading cause of cancer deaths among males in most countries. Among females, breast cancer was the most common cause of cancer deaths in 16 of 18 countries (with > 6 reported cases), accounting for 16.1–30% of cancer deaths and an ASMR of 10.0 to 27.3 per 100 000. The ASMR of cervical cancer was higher than the world average (6.8 per 100 000) in 11 countries, and accounted for 4.5–18.2% of cancer deaths.

**Conclusion:** There is great variability in cancer-specific mortality rates within the Caribbean region; however, prostate and breast cancers are consistently the leading causes of cancer-related deaths among males and females, respectively. Lung and cervical cancers—cancers for which World Health Organization “best buy” interventions exist—are also important causes of mortality in many countries.

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NIL