### **Public Health II**

Chairpersons: K Mungrue, T Maitland

#### O – 10 HIV/AIDS in Trinidad and Tobago: 2010 and Beyond

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**Objective:** The purpose of this study was to assess current trends in HIV/AIDS in Trinidad and Tobago, and determine if the annual number of new HIV-infections among adults and adolescents.

**Methods:** Data for the study were collected from the HIV/AIDS Coordinating Unit (HACU) of the Ministry of Health (MoH) for the period 2010–2014 and the Queen's Park Counseling Centre, a vertical programme also in the Ministry of Health. The data consisted of number of cases of HIV, AIDS and AIDS-related deaths by year, gender, age and geographic location.

**Results:** Between 2006–2014, the incidence proportion of HIV fluctuated between 11 per 10 000 population (CI 10.9-11.1) and 7.9 per 10 000 population (CI 7.85-7.95), of which children under one year of age accounted for < 1% of all cases, and the age group 15–40 years represented the majority of cases. At no time during this period was there a 50% reduction of new HIV cases, although there was a 19% reduction in 2009–2010. The human immunodeficiency virus was more common in urban areas and among persons of Africans descent.

**Conclusion:** The human immunodeficiency virus/acquired immunodeficiency syndrome occurrence between 2010–2014 demonstrates that although gains have been made in the control and prevention of the disease, the end is not imminent. Hence, we must innovate new approaches using evidenced-based technologies guided by the local epidemiology to achieve the 90-90-90 goals in 2020.

#### O – 11 Antibiotics use by poultry farmers in Grenada

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**Objective:** This study was conducted to understand poultry farmers' knowledge, attitudes and practices in relation to antibiotic use in poultry production in Grenada.

**Design and Methods:** A cross-sectional survey was administered to 30 poultry farmers producing 500 or more chickens for commercial purposes from August to September 2016 to collect data on antibiotic use in production, knowledge about antimicrobial resistance (AMR), training and awareness of the use of antibiotics, monitoring of antibiotic use and AMR surveillance.

**Results:** The majority of respondents, 25 (83%) used antibiotics in their poultry production; however, there were gaps in the level of knowledge and prudent use of antibiotics. Between 37 to73 per cent of respondents agreed with 80% of incorrect statements about how and when antibiotics should be used. More than half of respondents, 19 (63%), reported that they were only somewhat aware about issues related to antibiotic use and the majority, 21 (70.00%), was unable to define AMR. Most respondents did not use antibiotics in compliance with manufacturers' recommendations and none was aware of programmes to monitor antibiotic use or AMR surveillance. Education and restricting prescription of antibiotics were most frequently recommended by respondents to address AMR in poultry production.

**Conclusion:** The findings highlight widespread lack of knowledge and inappropriate antibiotic use in the poultry industry that requires immediate intervention to encourage the judicious use of antibiotics and the establishment of systems for monitoring antibiotic use. The establishment of protocols for antibiotic use and AMR surveillance and response are essential to address the issues related to antibiotic use/mis-use and its contribution to AMR burden in the poultry industry.

#### O – 12

# Trends in tobacco use among Guyanese youths from 2000–2015

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**Objective:** To demonstrate trends in tobacco use among Guyanese youths.

**Design and Methods:** Data from four consecutive Global Youth Tobacco Surveys was analysed. Frequencies were compared on use of tobacco according to age, gender, access, exposures to advertising and passive smoking, knowledge of harmful effects, attitude towards smoking, and smoking cessation. Comparisons were made between surveys to determine trends.

**Results:** Current tobacco use increased only in 2010. Access doubled between 2000 and 2015 (25.6%, 54.5%). Girls had a four-fold increase in access (10.9% *versus* 46.5%). Exposure to second hand smoke at home was significantly reduced (2000 – 70%; 2015 – 18.5%); exposure in enclosed public places fluctuated (2000 – 31.6%; 2004 – 61.1%; 2010 – 55%; 2015 – 28.6%). Significant reductions occurred in percentage of students offered a free product (2000 – 73.8%; 2015 – 11.5%) and in students who owned something with a tobacco product logo (2000 – 94.5%; 2015 – 16.4%). Students wanting to quit smoking fluctuated (2000 – 74.7%; 2004 – 60.6%; 2010 – 81.5%; 2015 – 70.1%). Those who tried to quit was reduced (2000 – 82.0%; 2015 – 70.0%).

**Conclusions:** Students using tobacco products, being exposed to passive smoking, being offered a free product and owning something with a logo reduced over-time. Students who wanted to and tried quitting smoking face many challenges. Policy and programme planners need to plan accordingly.

#### **O** – 13

## Non-communicable disease mortality and trends in the Caribbean region

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**Objective:** This study examined the annual age-adjusted mortality rates and trends for non-communicable disease (NCD) in the Caribbean region.

**Design and Methods:** We calculated age-standardized mortality rates and trends due to cancer, heart disease, cerebrovascular disease, and diabetes for the most recent, available five years of mortality data (ranging from 2003 to 2013) submitted to the Caribbean Public Health Agency (CARPHA) by 21 English and Dutch-speaking Caribbean countries and two US territories; Puerto Rico (PR) and the US Virgin Islands (USVI). Calculations were completed using SEER\*Stat software and the World (Segi 1960) Standard Million population and annual percent change (APC) for trends were calculated using join-point.

**Results:** Mortality due to cancer and heart disease were leading causes of deaths, accounting for more than 30% of all deaths in the region. A significant increase in mortality trends were observed for cancer (APC = 5.3) and cerebrovascular disease (APC = 7.9) in Grenada and diabetes in Jamaica (APC = 5.0) and St Vincent and the Grenadines (APC = 46.7). Additionally, there was a significant decrease in mortality trends for heart disease (APC = -12.8) in Bermuda, cerebrovascular disease (APC = -7.8) in Suriname and diabetes (APC = -15.1) in Curacao.

**Conclusion:** There is great variability in NCD mortality trends within the Caribbean region. Mortality due to cancer, cerebrovascular disease and diabetes are on the rise for more than half of the countries in our study. These findings are noteworthy and underscore the importance of addressing modifiable risk factors such as: obesity, physical inactivity, smoking and alcohol consumption which are of major concern in the Caribbean region.